

**AK360**  
PRESERVATION BOARD  
SUBMISSION

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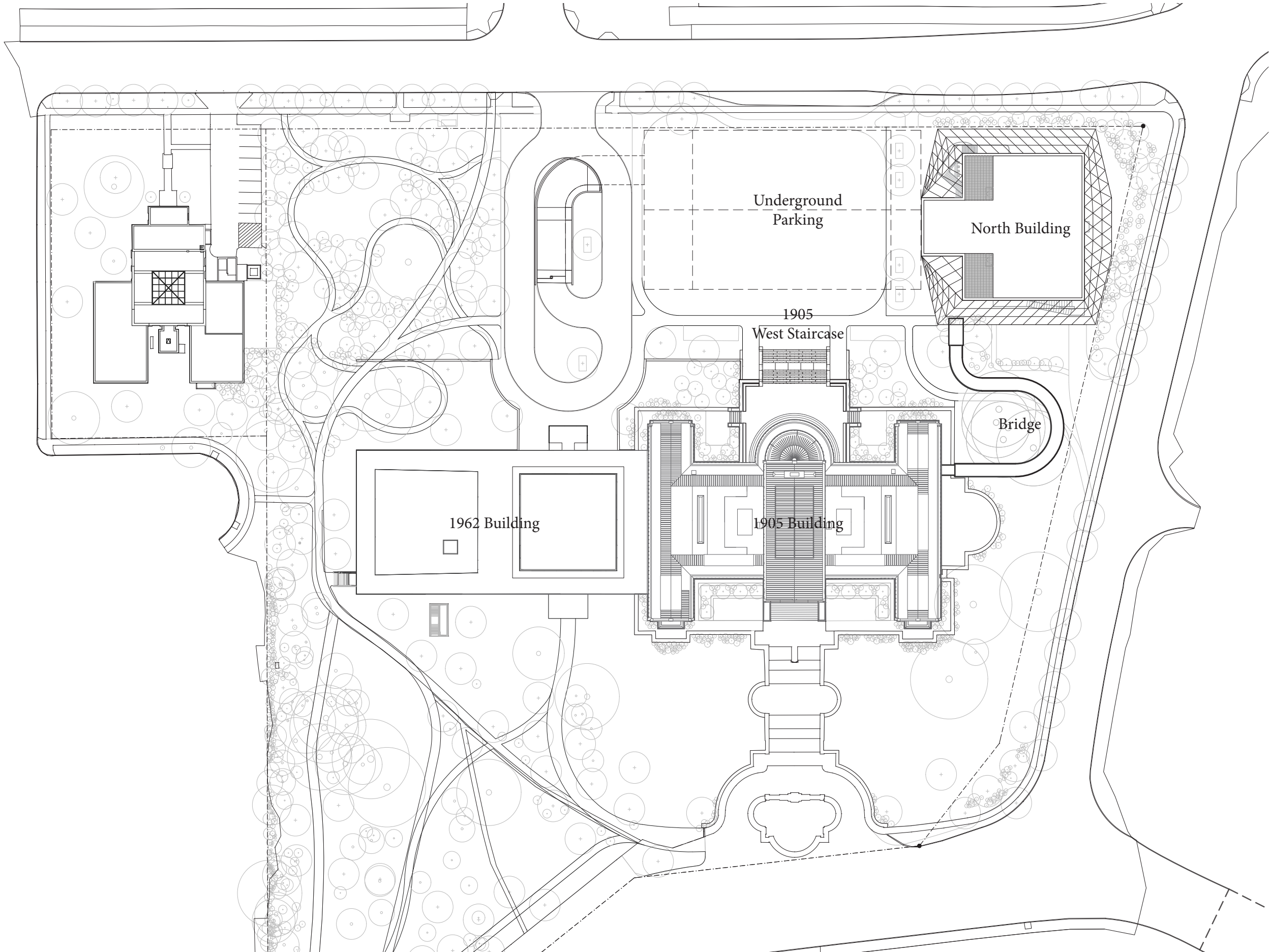
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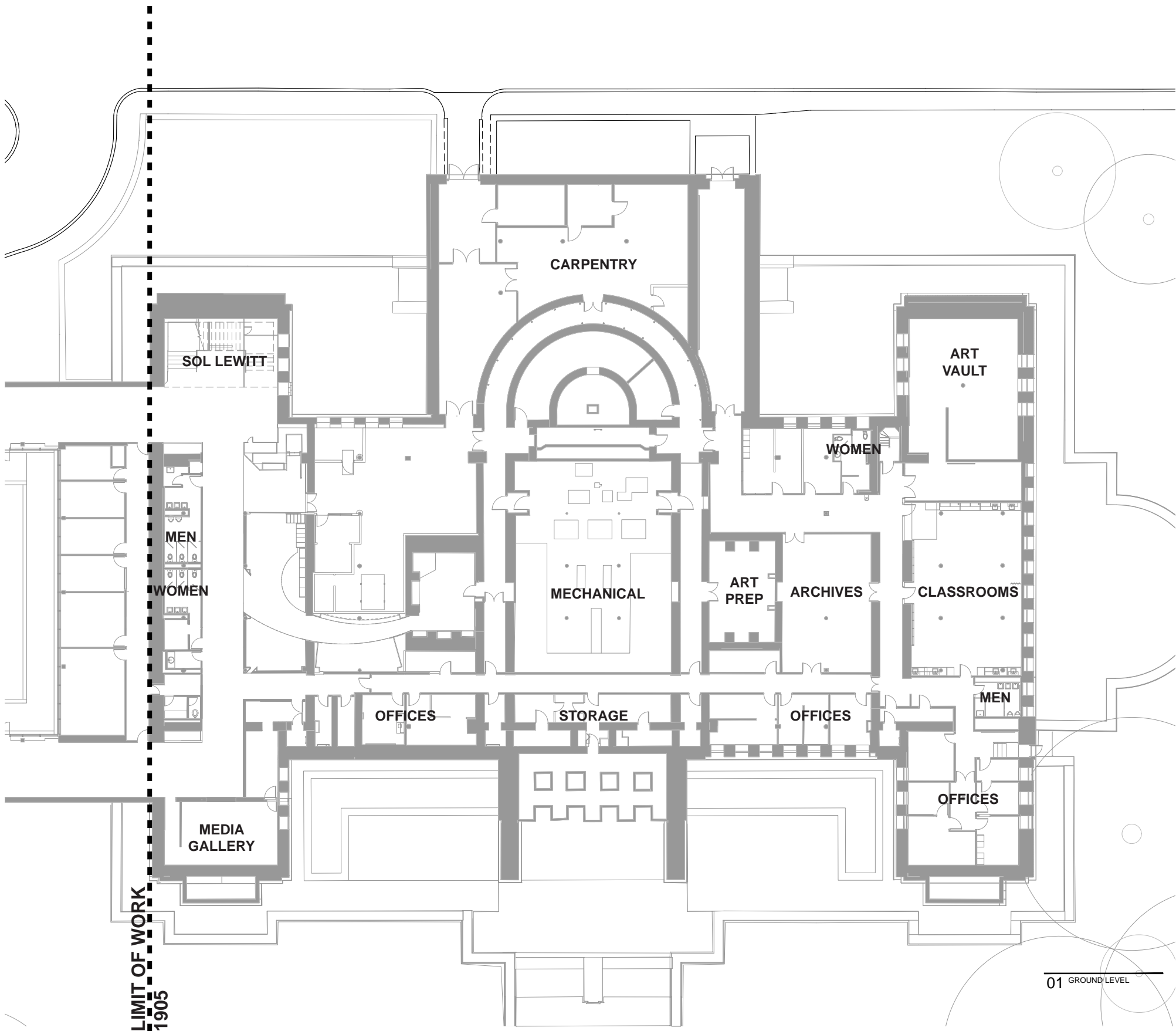




# PROPOSED 1905 MODIFICATIONS

1905 EXISTING PLAN -  
BASEMENT LEVEL

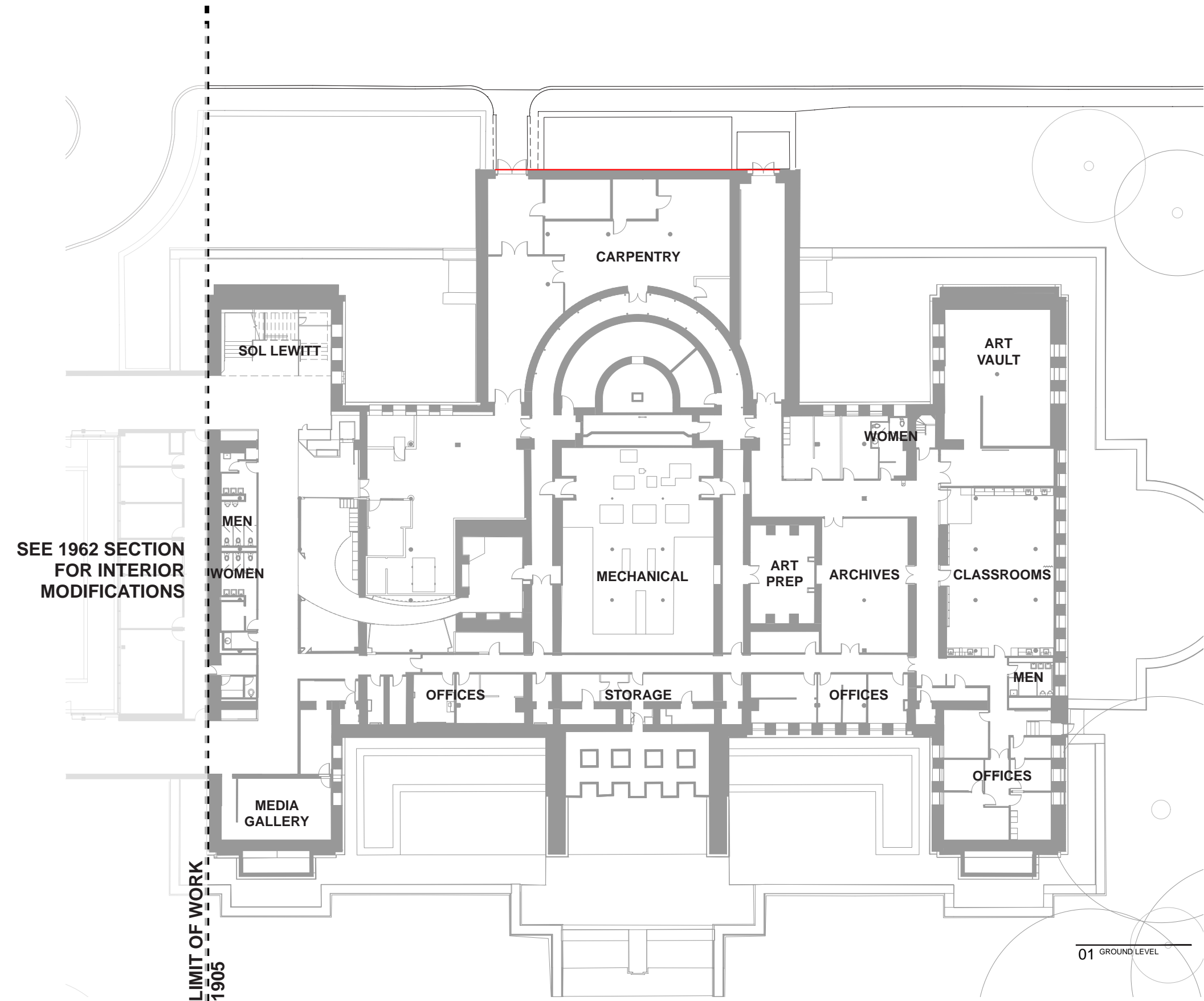
The existing 1905 basement will undergo minor modifications to accommodate the proposed new art path, increase in occupancy and required ADA upgrades to enhance accessibility.



PROPOSED 1905 MODIFICATIONS  
BASEMENT LEVEL

1905 Proposed Removal Plan

The removal of historic material on the exterior basement level is limited to what is required to re-instate the original 1905 stair on the west.



PROPOSED 1905 INTERIOR  
MODIFICATIONS - BASEMENT LEVEL

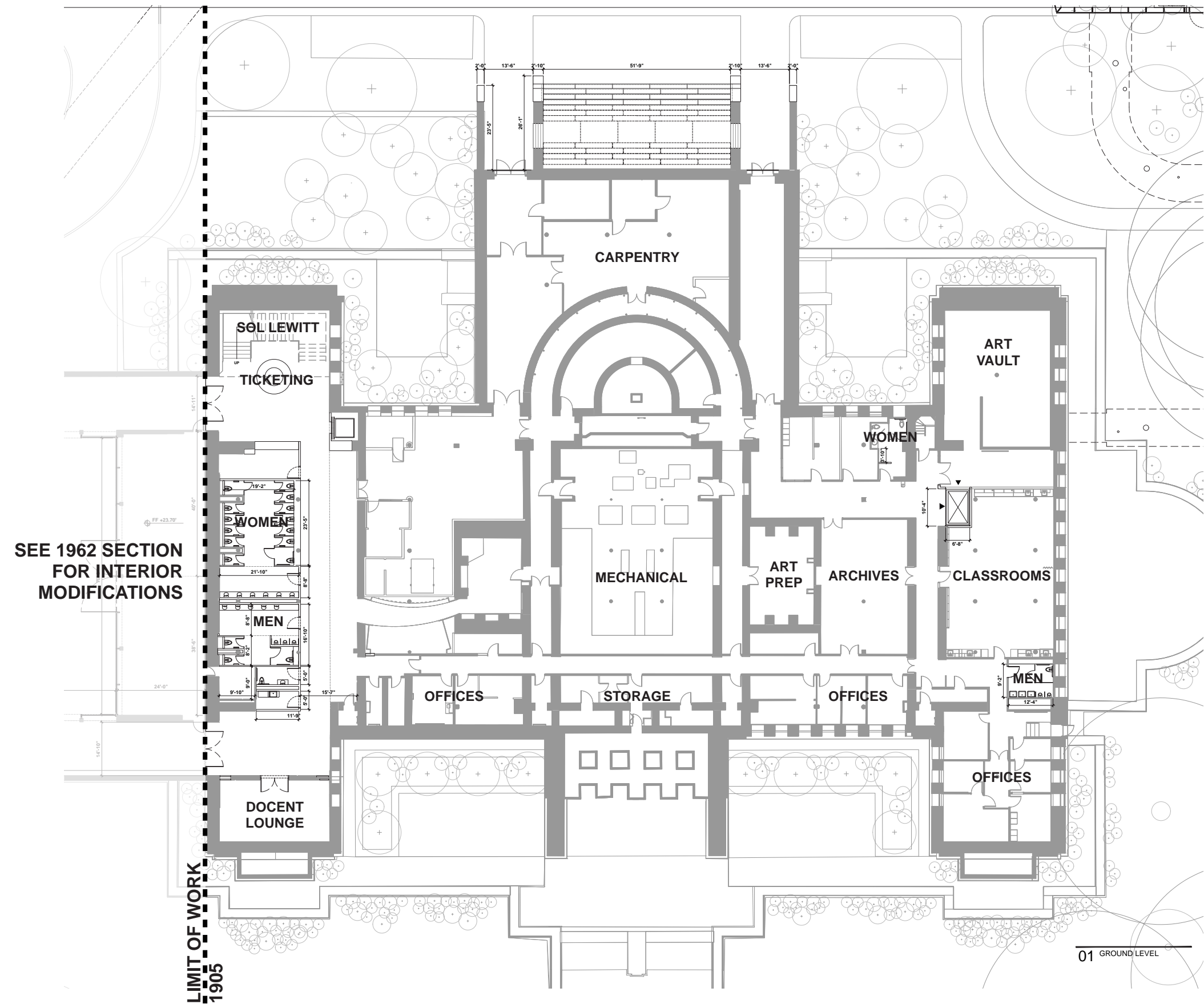
1905 Interior Basement Modifications

Bathroom renovations upgrades and expansion are shown in this plan, along with the proposed modification to accommodate the new floor lift and renovated media gallery into the Docent Lounge.

The proposed lift will land between the existing Classrooms and the existing Art Vault will require modifications to the existing lighting layout.

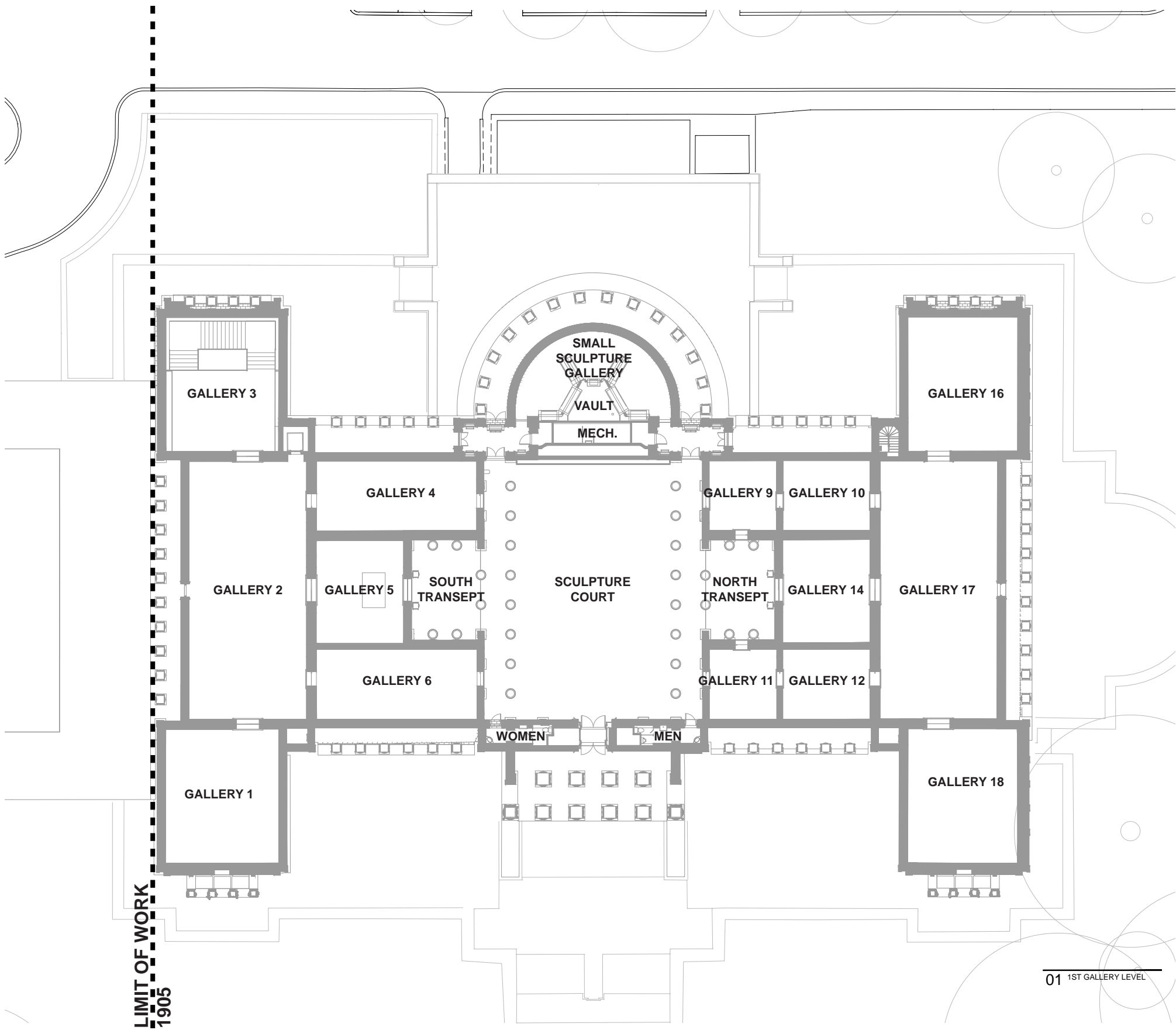
Bathroom renovations and expansion will require modifications to the location of ceiling fixtures, lighting and fire safety devices.

The existing Media Gallery will be modified to accommodate for a future Docent Lounge area requiring modifications to the locations of existing lighting fixtures.



PROPOSED 1905 INTERIOR  
MODIFICATIONS - GALLERY LEVEL

1905 Existing Gallery Level Plan

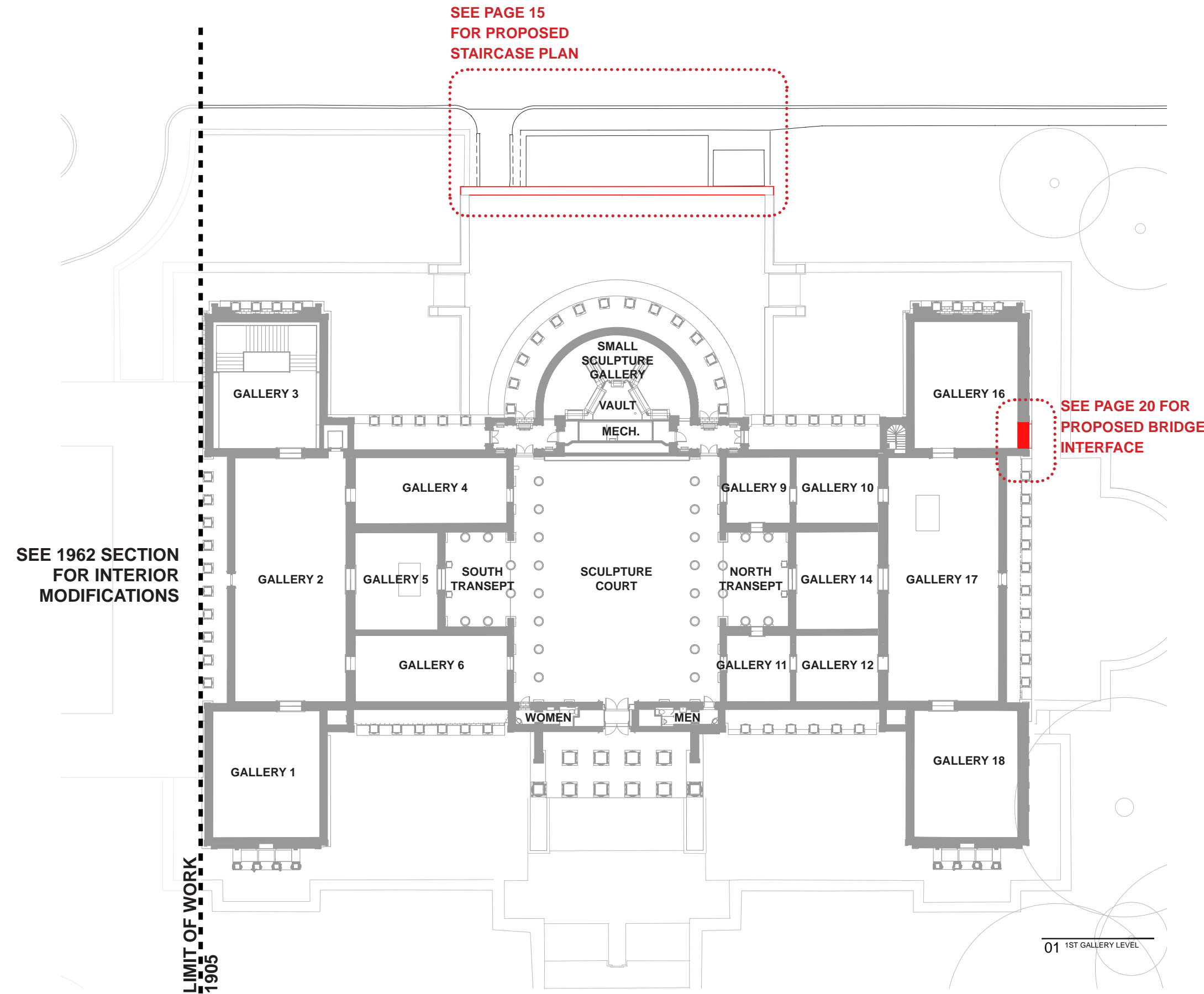




PROPOSED 1905 INTERIOR  
MODIFICATIONS - GALLERY LEVEL

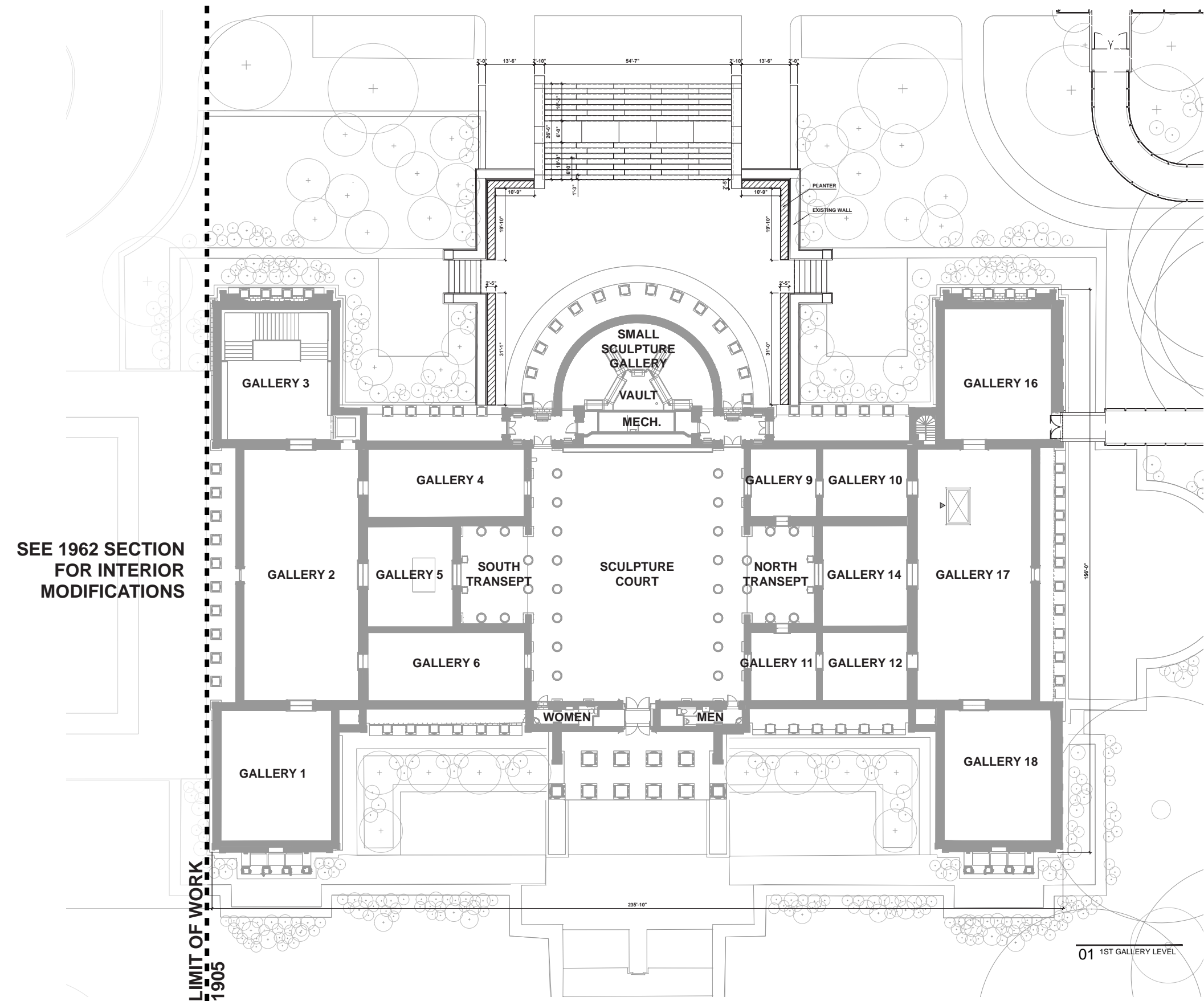
1905 Proposed Gallery Level Plan

The proposed modifications to the Gallery Level of the 1905 building are limited to the proposed bridge interface and the reinstatement of the 1905 stair.



PROPOSED 1905 INTERIOR  
MODIFICATIONS - GALLERY LEVEL

1905 Proposed Gallery Level Plan





# CONSTRUCTION OF WEST STAIRCASE

ORIGINAL 1905  
WEST STAIRCASE

The 1905 Building is a symmetrical Neoclassical edifice built of white marble with a grand staircase on its east façade facing Hoyt Lake and Delaware Park; originally the west side of the building also featured a staircase that rose to a portico surrounding a hemicycle form at the center of the west façade.

ORIGINAL





CONSTRUCTION OF 1905  
WEST STAIRCASE

It is our intention to re-instate the historic staircase that was removed to accommodate the parking lot that was added as part of the construction of the 1962 addition. The materiality and form of the stair will be very similar to the original with some simplification of the classical stone detailing.

EXISTING



PROPOSED

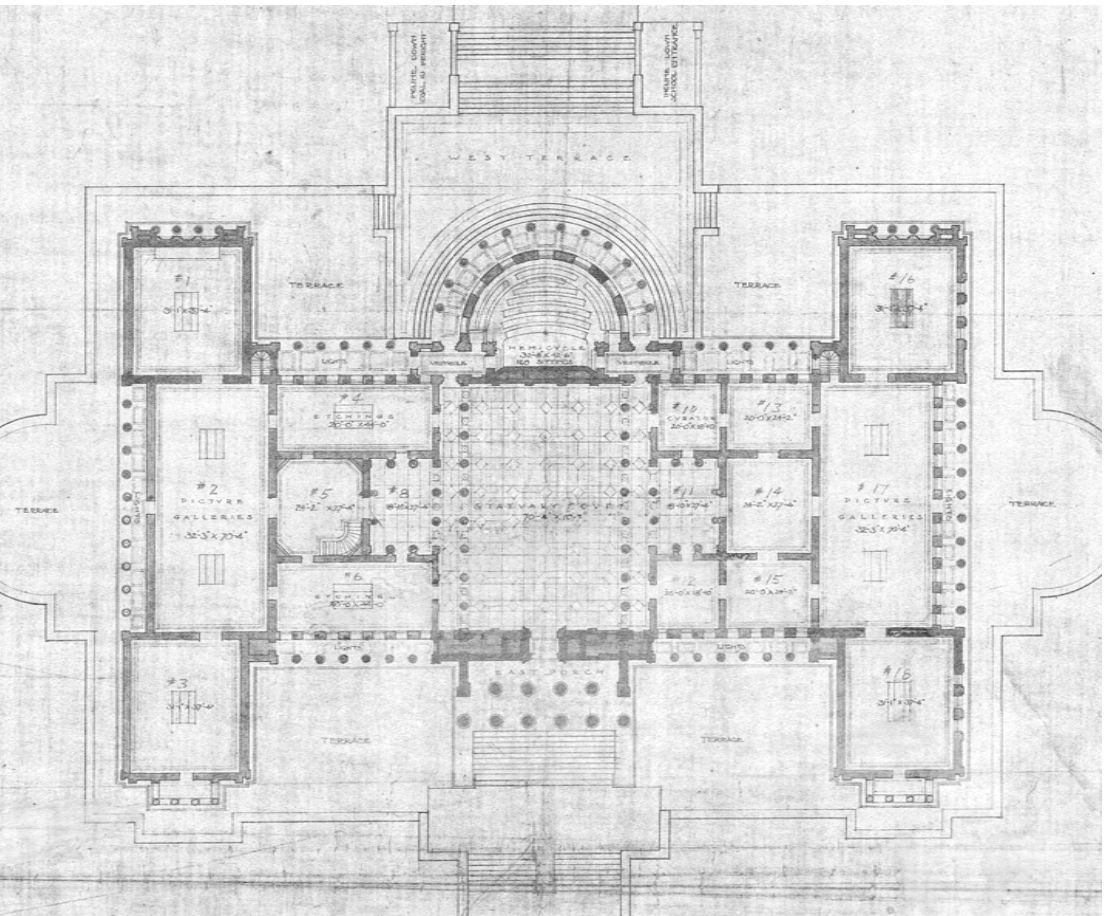




CONSTRUCTION OF 1905  
WEST STAIRCASE

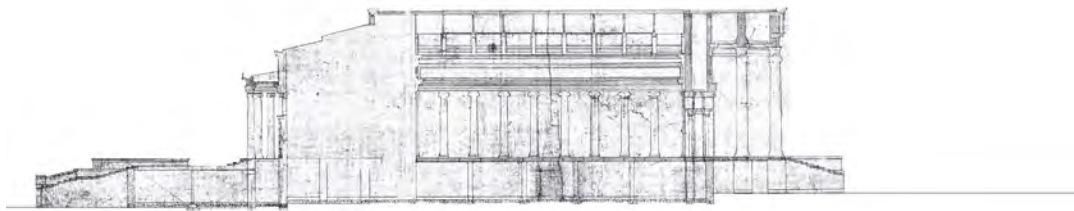
The 1905 Building is a symmetrical Neoclassical edifice built of white marble with a grand staircase on its east façade facing Hoyt Lake and Delaware Park; originally the west side of the building also featured a staircase that rose to a portico surrounding a hemicycle form at the center of the west façade. It is our intention to re-instate the historic staircase that was removed to accommodate the parking lot that was built with the 1962 addition. The materiality and form of the stair will be very similar to the original with some simplification of the classical stone detailing. The reinstatement of the stair creates fall hazards at the Northwest and Southwest corners of the portico plaza, as a result the balustrades have been reshaped to comply with current codes for rail heights at steps and landings. While there is a symbolic value to the reinstatement of the stair, it will also serve as our egress path from the west portico that will require some illumination. It is our intent to integrate LED illumination in the base of the risers.

1905  
E. B. Green Drawings



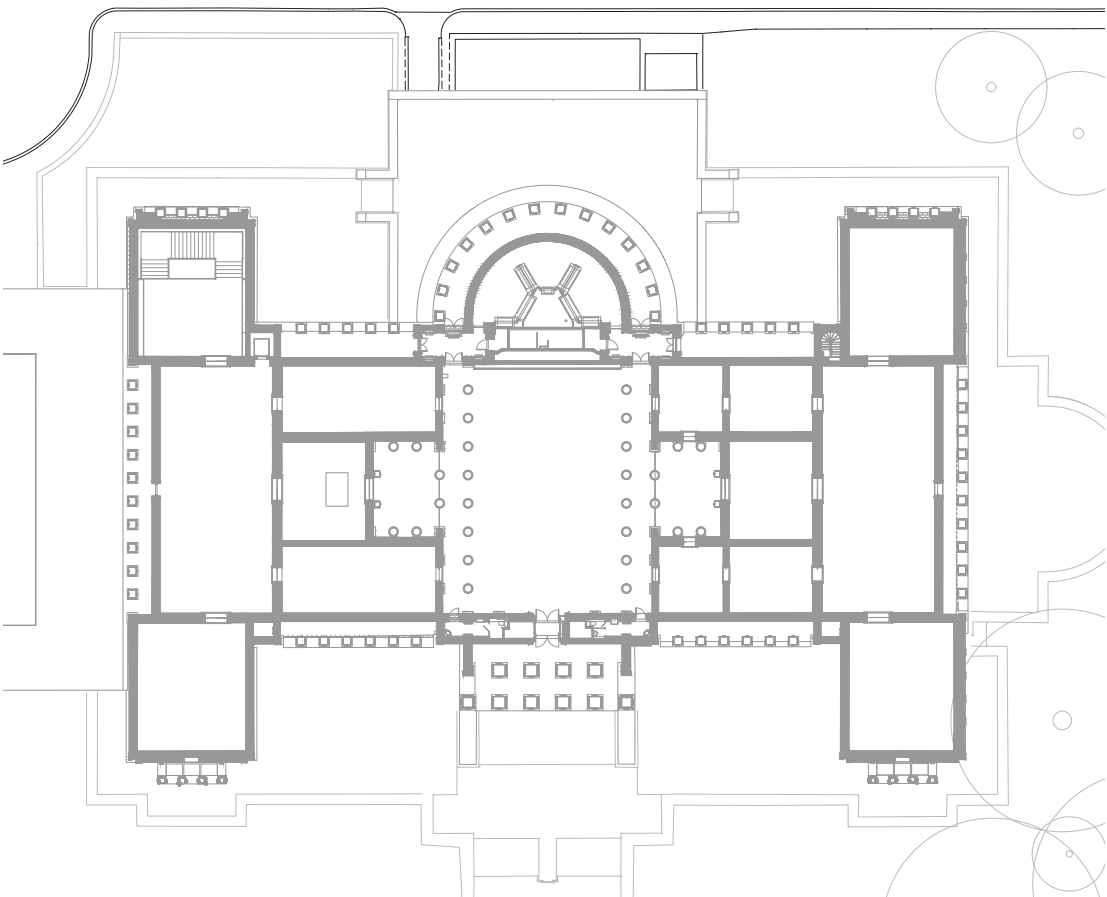
3

1. 1905 E. B. Green Original Gallery Plan



3. 1905 E. B. Green Original Transversal Section

EXISTING



4

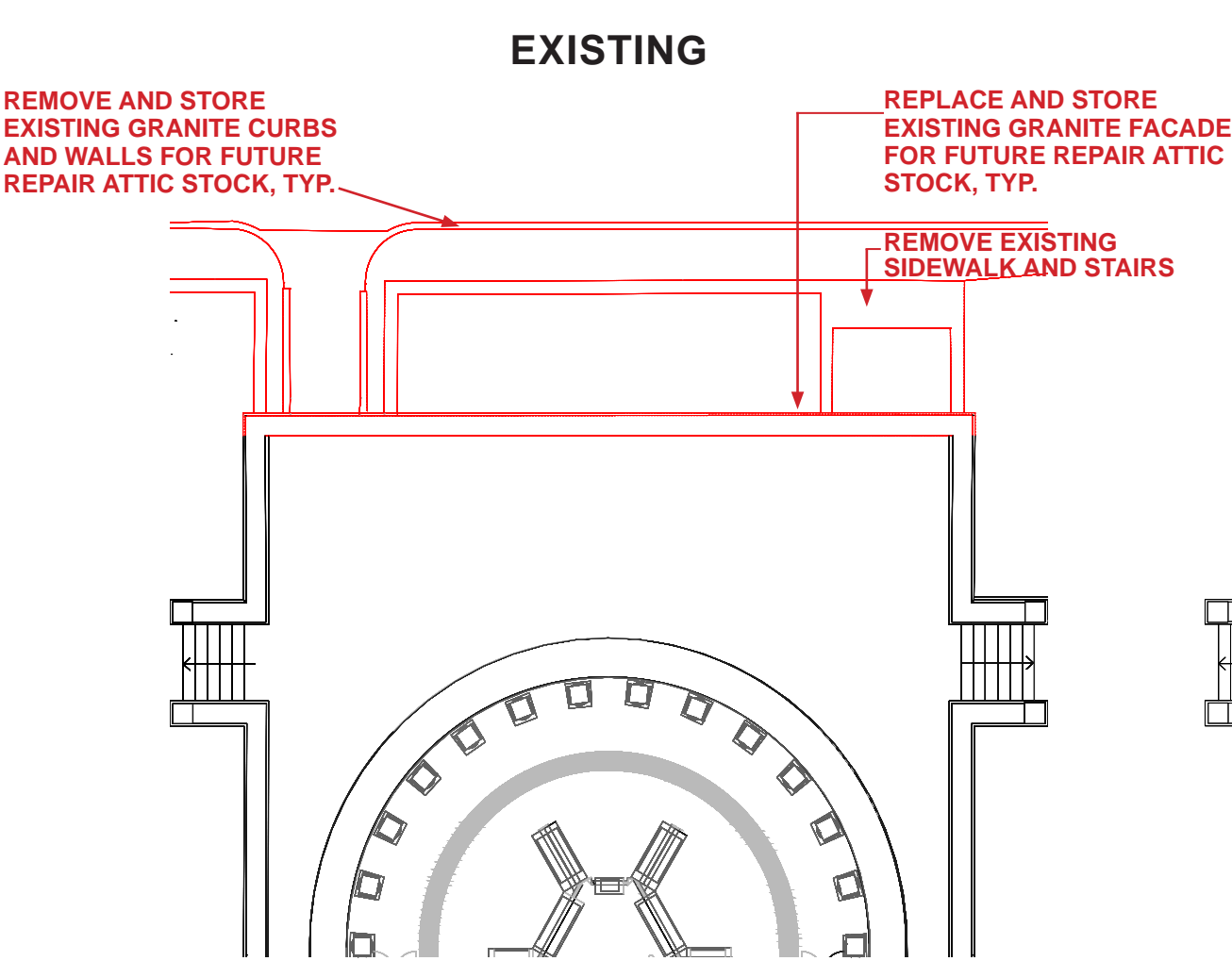
2. Existing Gallery Plan



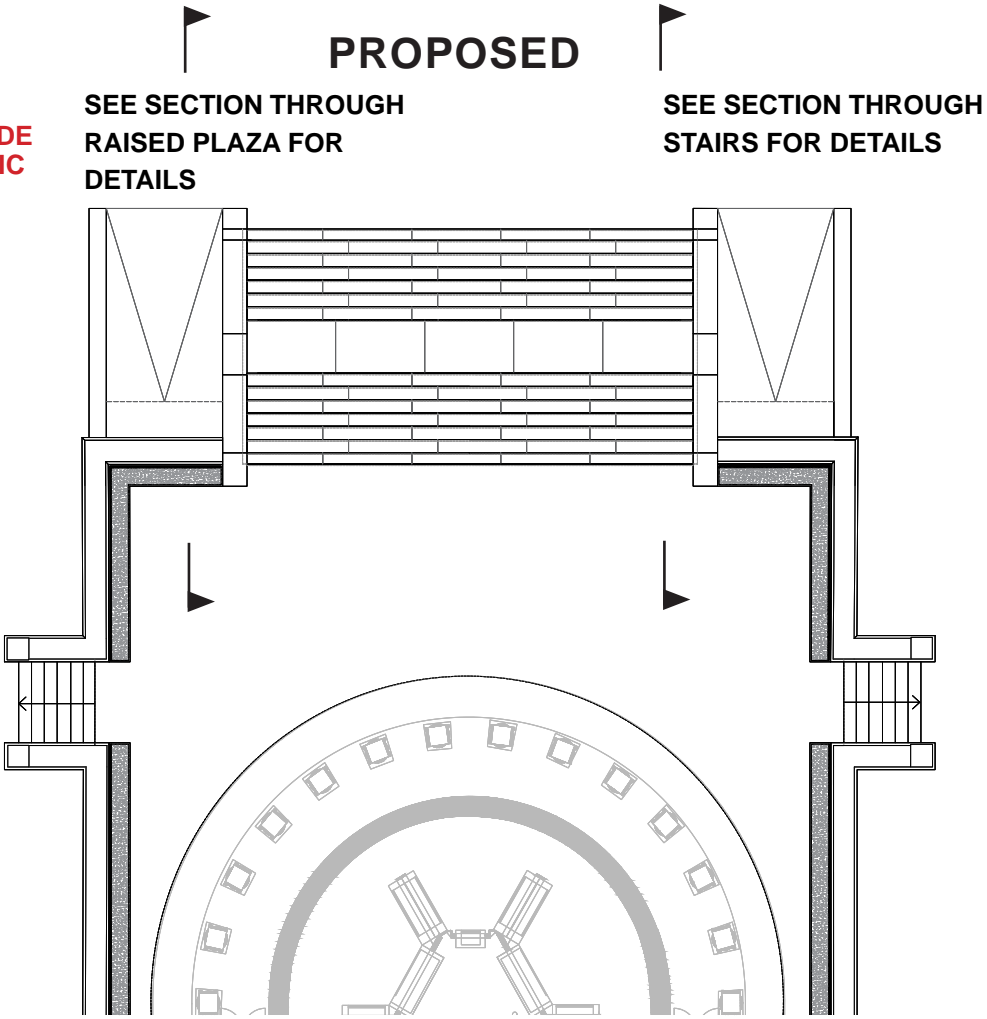
4. Existing Transversal Section

CONSTRUCTION OF 1905  
WEST STAIRCASE

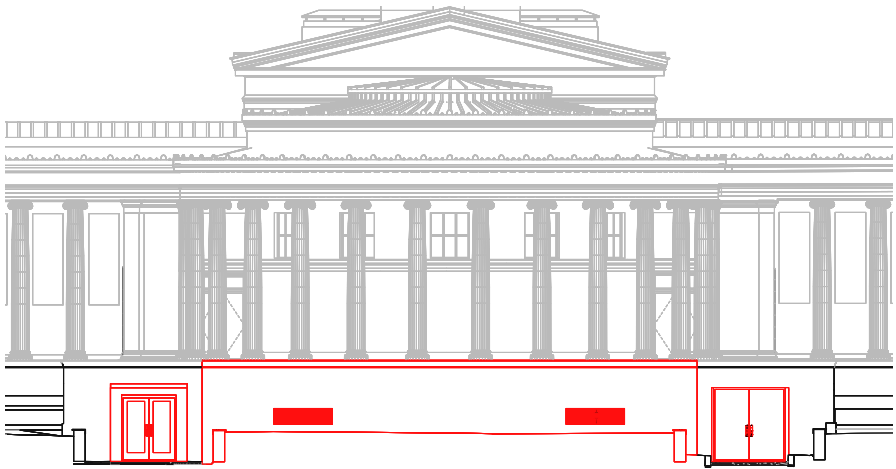
The reinstatement of the stair creates direct access to the new lawn area created by relocating the parking function to an underground parking structure. This reconnects the viewshed of the 1905 facade to Elmwood Avenue restoring not only the original intent of the staircase but the idea of a museum in the park.



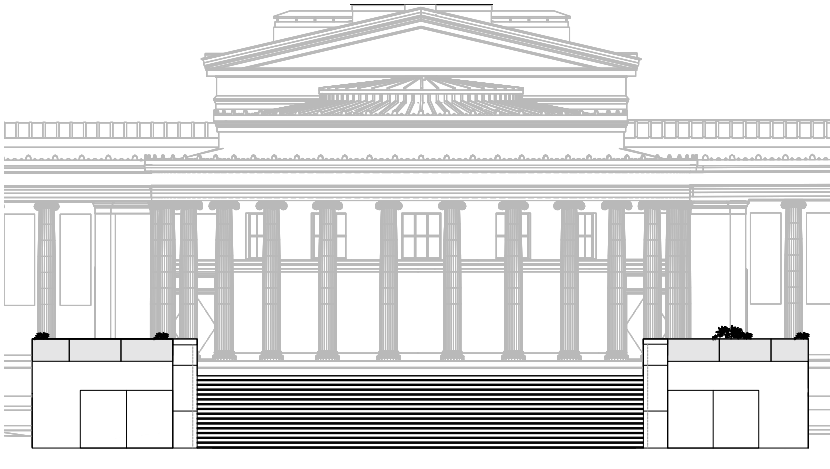
1. Existing 1905 Plan of West Staircase



2. Proposed 1905 Plan of West Staircase



3. Existing West Elevation

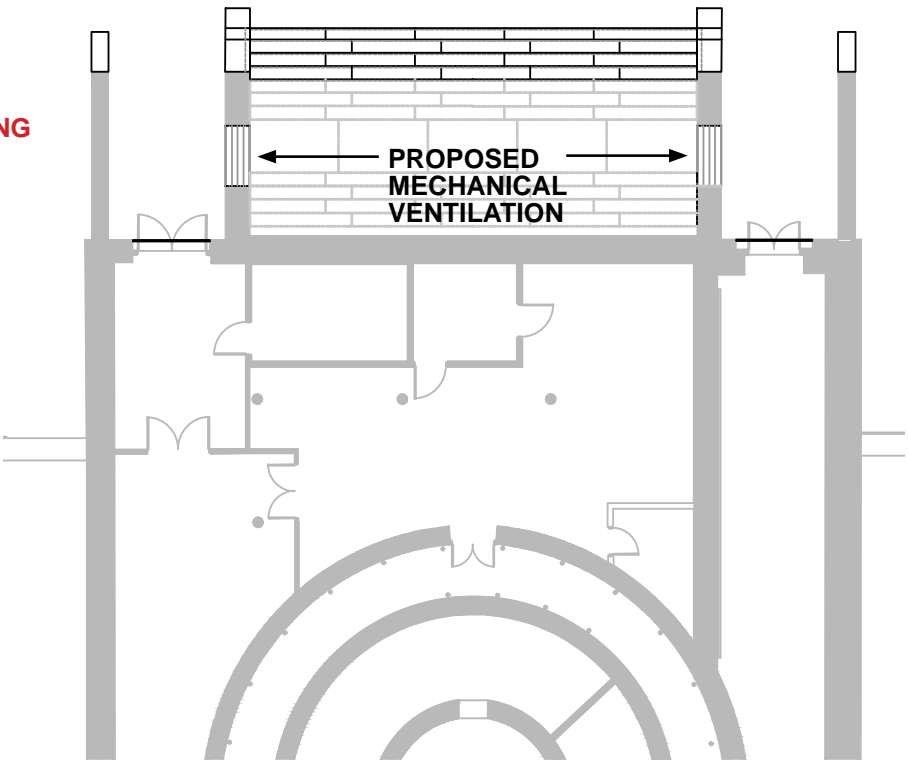
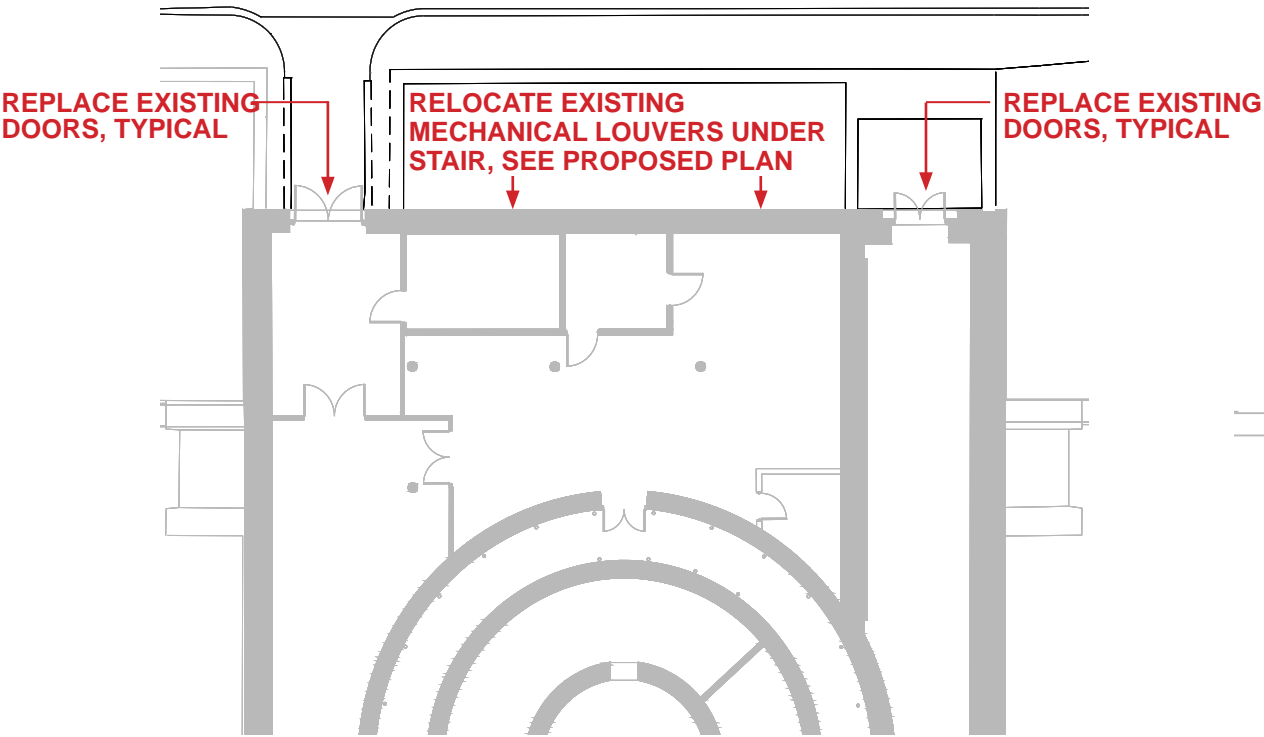


4. Proposed West Elevation

CONSTRUCTION OF 1905  
WEST STAIRCASE

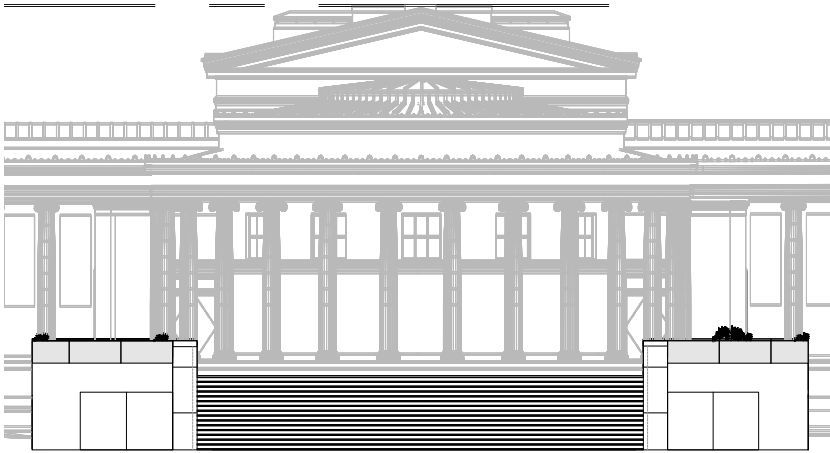
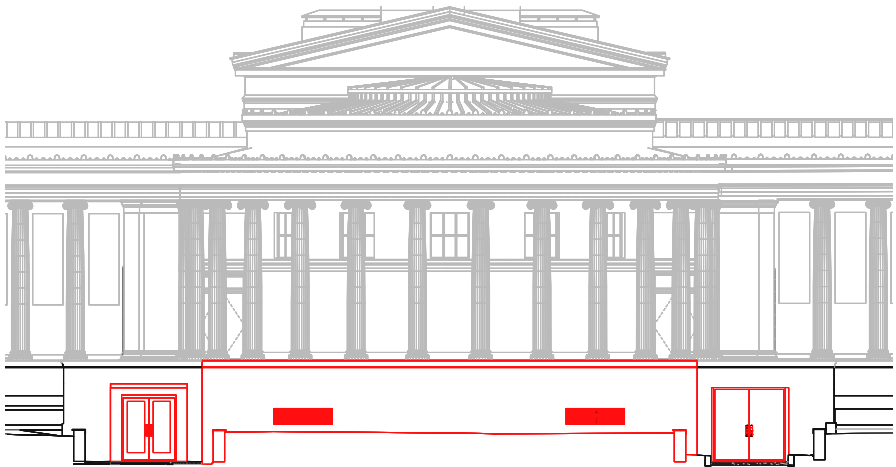
Existing

Proposed



1. Existing 1905 Basement Plan

2. Proposed 1905 Basement Plan



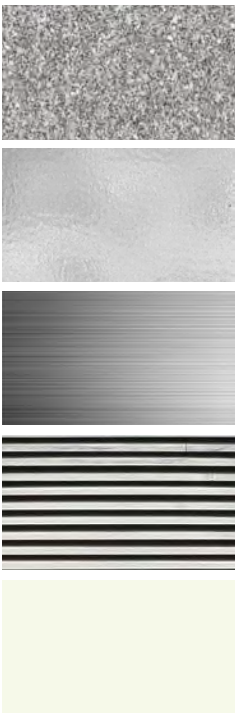
3. Existing West Elevation

4. Proposed West Elevation



# CONSTRUCTION OF 1905 WEST STAIRCASE

Unfortunately, this also introduces fall hazards at the Northwest and Southwest corners of the portico plaza. As a result the balustrades have been reshaped to comply with current codes for rail heights at steps and landings. While there is a symbolic value to the reinstatement of the stair, it will also serve as our egress path from the west portico that will require proper illumination. It is our intent to integrate LED illumination in the base of the risers.



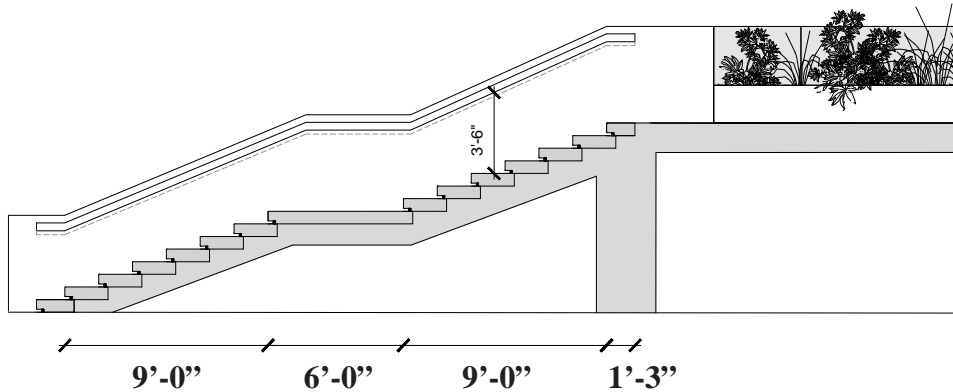
- 1. Barre Gray Granite, Vermont Cubic or Dimensional Stone
- 2. Frameless, Top Mount, Tempered Glass Balustrade with Stainless Steel Guardrail & Handrail
- 3. Planters, Stainless Steel
- 4. Exhaust Vent, Stainless Steel Louvers
- 5. Outdoor LED Linear Step Lighting



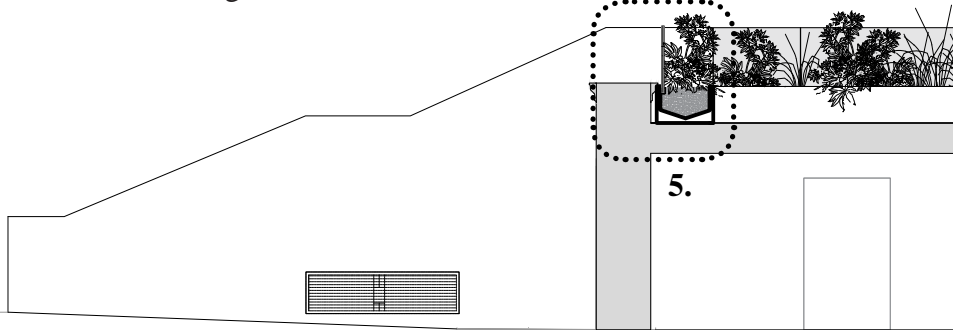
1. West Facade of the 1905 Building  
Photograph: Exhibition of Contemporary American Sculpture, 1916



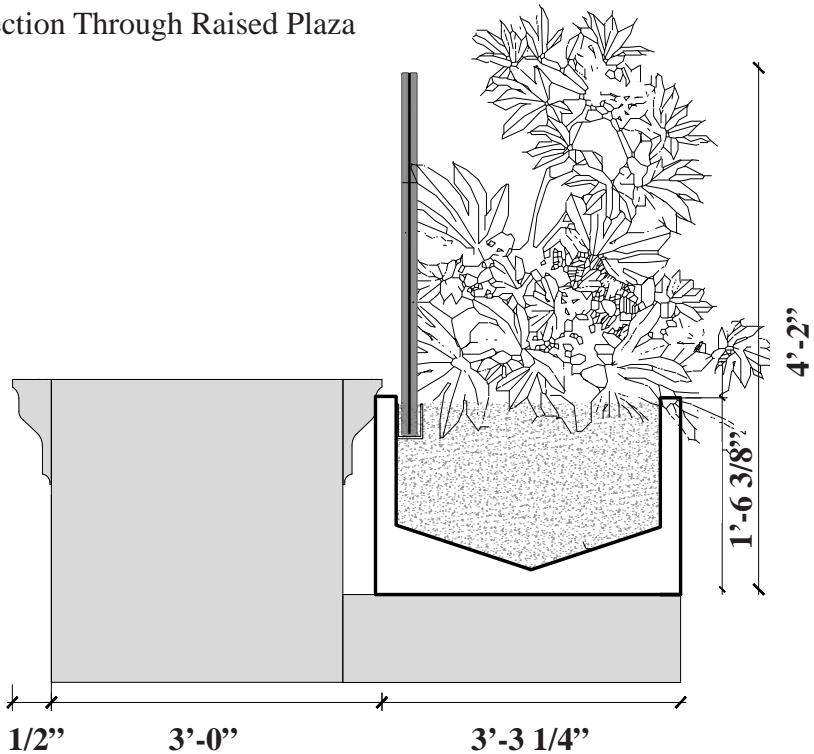
4. West Facade Render, Proposed Stairs and Planters.



2. Section Through Stairs



3. Section Through Raised Plaza



5. Detail Through Planter

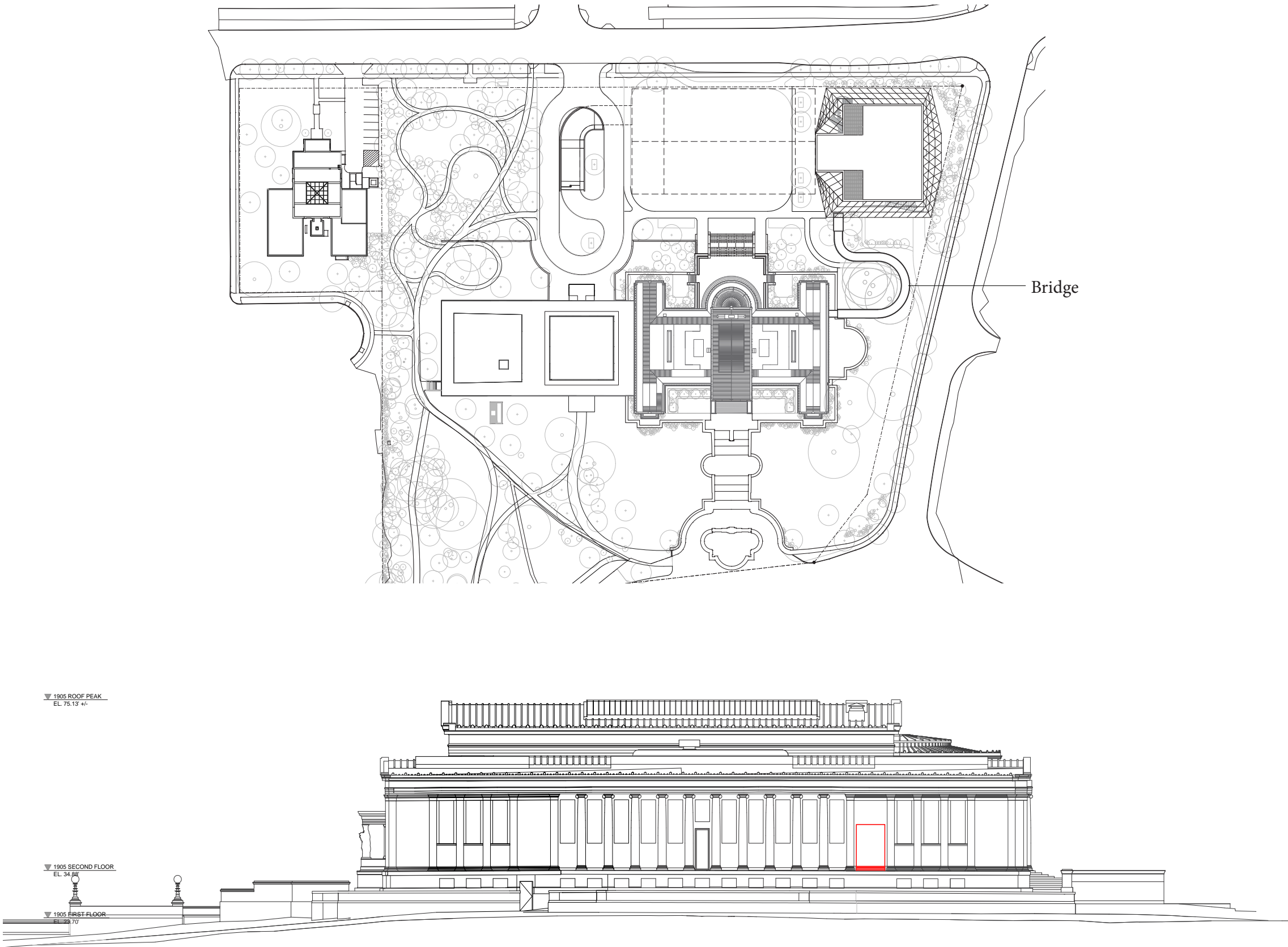
# PROPOSED 1905 NORTH BUILDING BRIDGE CONNECTION



# 1905 NORTH BUILDING BRIDGE CONNECTION GALLERY LEVEL

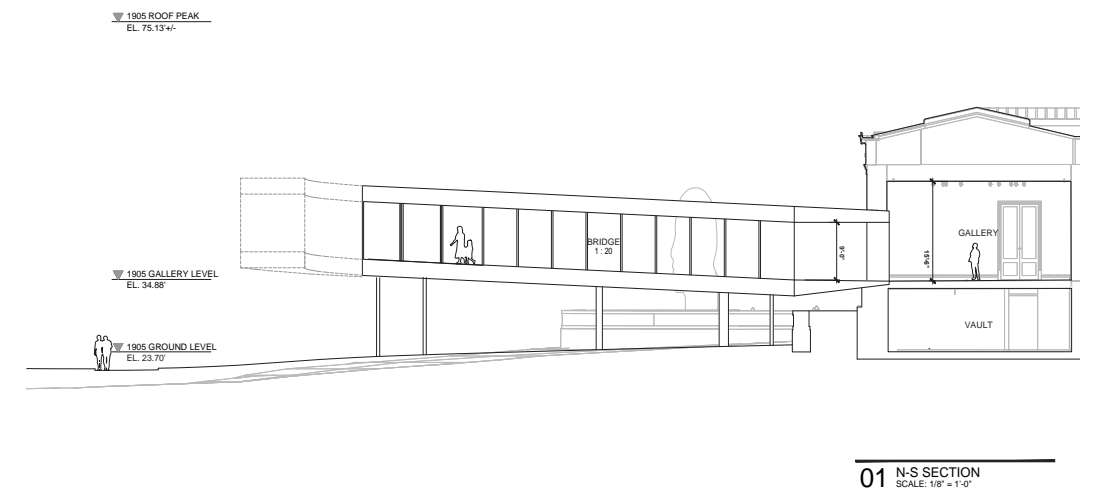
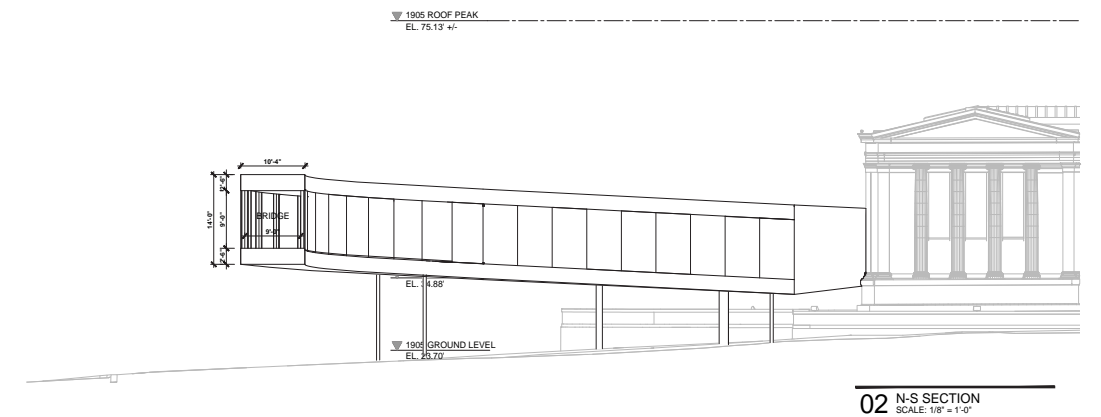
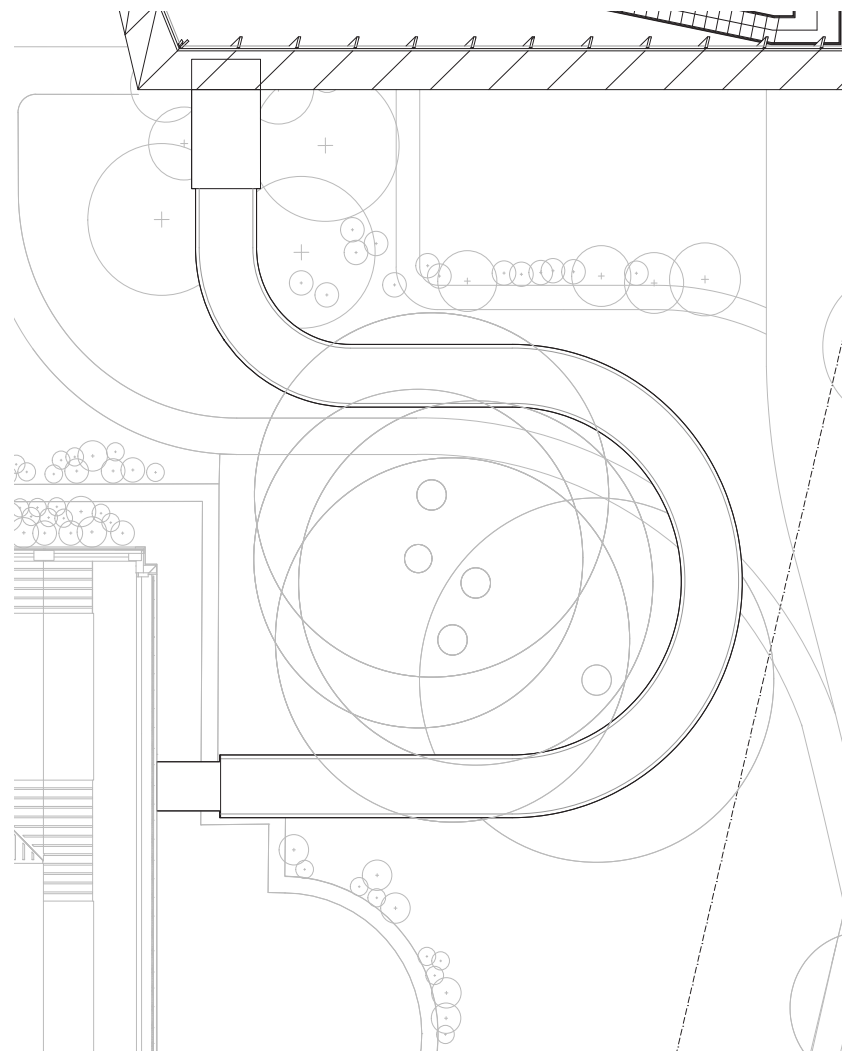
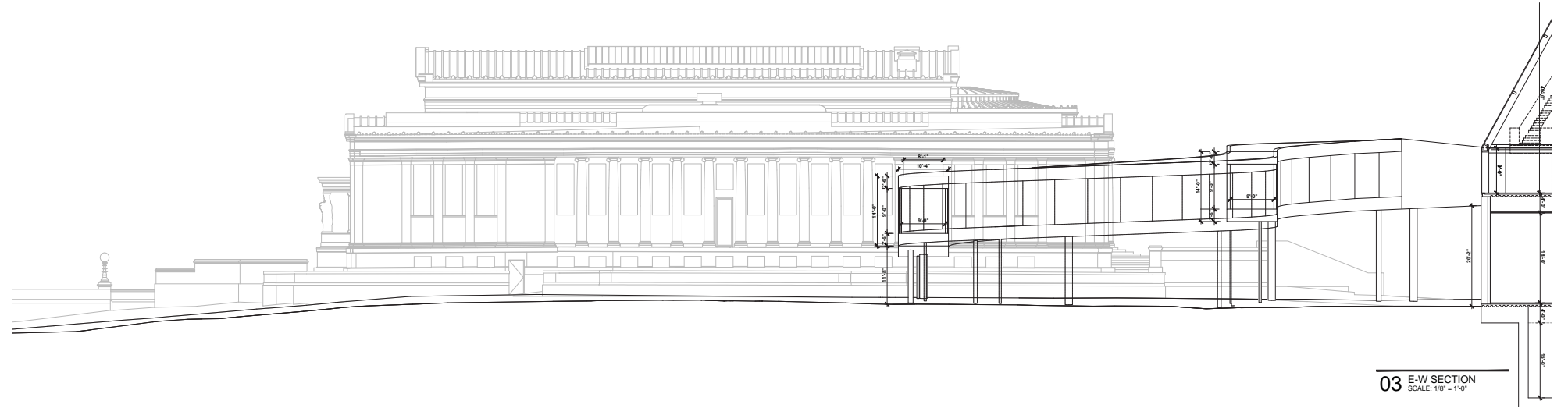
As the scale of artwork has only increased over the past sixty years, the Albright-Knox’s greatest challenge with respect to caring for its world-class collection and operating an exhibition program is the lack of a loading dock to move large-scale works of art in and out of the building. The largest aperture in either building is at the top of the historic Delaware Stairs on the east side of the 1905 Building (the museum’s original entrance).

The absence of a loading dock requires that a crane be deployed to hoist large crated artworks from the bottom of the Delaware Stairs to a purpose-built, temporary landing at the top of the stairs in order to bring such artwork in through the Sculpture Court doors. Although this transport method is against national museum standards and best practices, the limitations of the current buildings require that all large artwork move in and out of the building in this manner. One large-scale sculpture seriously considered for acquisition by the Albright-Knox over the course of two years (2014–16) was ultimately rejected in large part because its crated dimensions (even in multiple parts) were too large to fit through the Sculpture Court doors—an indication that the current facilities have begun to constrain the museum’s mission as a collecting institution. The lack of loading dock access to the galleries of the 1905 Building is its greatest weakness.



# 1905 NORTH BUILDING BRIDGE CONNECTION GALLERY LEVEL

With the proposed North Addition, a proper loading dock is currently being planned along with an accessible bridge to connect the loading functions of the proposed North Building with the 1905 Galleries. This will greatly increase the museums functionality and align our art receiving and placement abilities with national standards for the care of art.





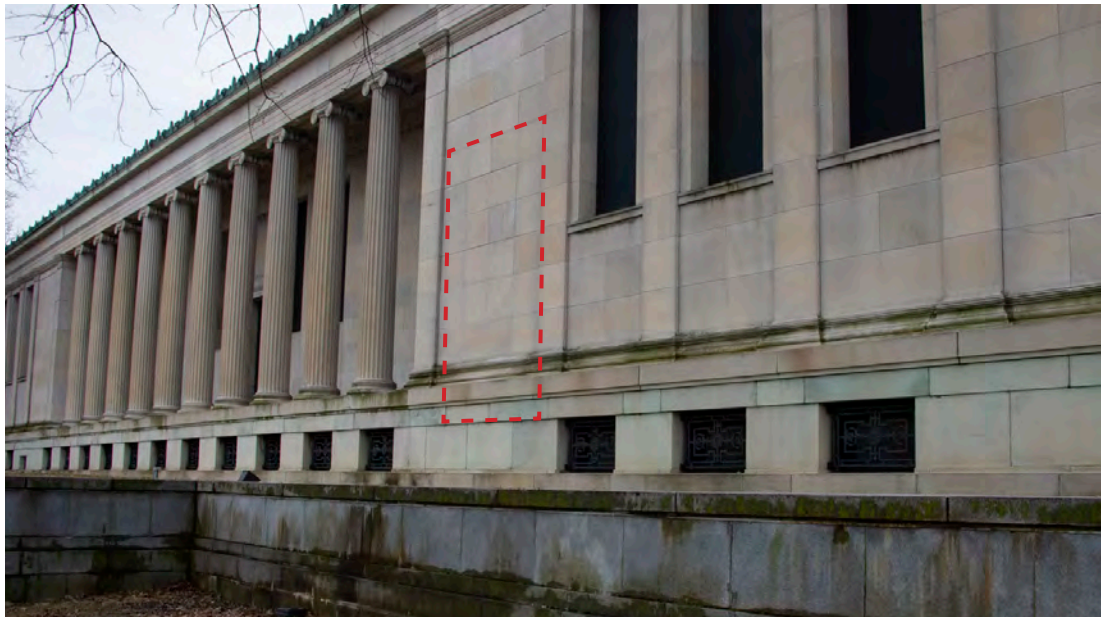
1905 NORTH BUILDING  
BRIDGE CONNECTION

The Bridge is thoughtfully designed to provide a low sloped path for the movement of art and visitors in a manner that minimizes the impact and preserves the existing old-growth oak trees. The structure of the bridge is cast in place concrete with a steel frame mounted on top to provide structure for the enclosure. The bridge walls will be clad with full height mirrored glazing, adding a sense of depth and movement. The roof, which will be visible from the North building , will be clad with metal roofing panels.

The moment insertion of the bridge into the 1905 existing facade was coordinated such that we minimized disruption to the historic pilasters and window openings. It is our intention to remove and store the stone needed to create the opening and save it for the necessary facade repairs.

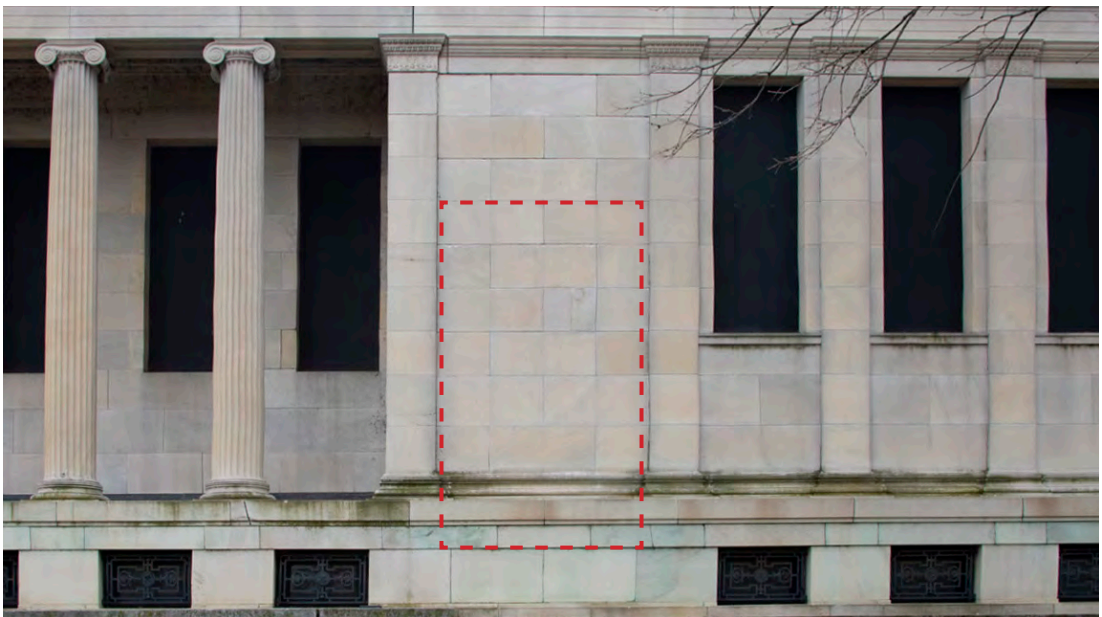
In addition, we were able to taper the structure and minimize the touchpoint of the bridge on the 1905 facade by locating all the mechanical equipment serving the bridge in the proposed North Addition. While this means we have a less efficient air distribution system, it allows for this most minimal interface possible.

EXISTING



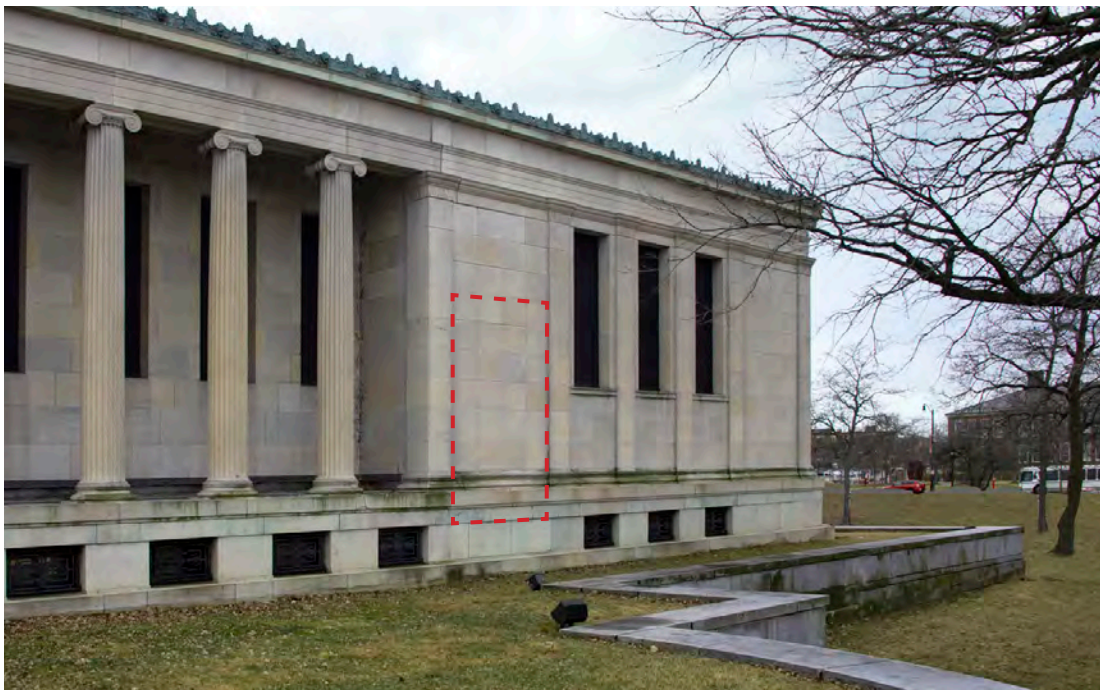
1. 1905 Current Facade, from Northeast corner

EXISTING



2. 1905 Current Facade

EXISTING



3A. 1905 Current Facade, from Northwest

PROPOSED



3B. Proposed Bridge Connection, Exterior of 1905



1905 NORTH BUILDING  
BRIDGE CONNECTION  
GALLERY LEVEL

The penetration into the Gallery 16 was designed such that we matched the height of the existing gallery portals, providing a seamless user experience from gallery to bridge.

EXISTING



1. 1905 Current Gallery

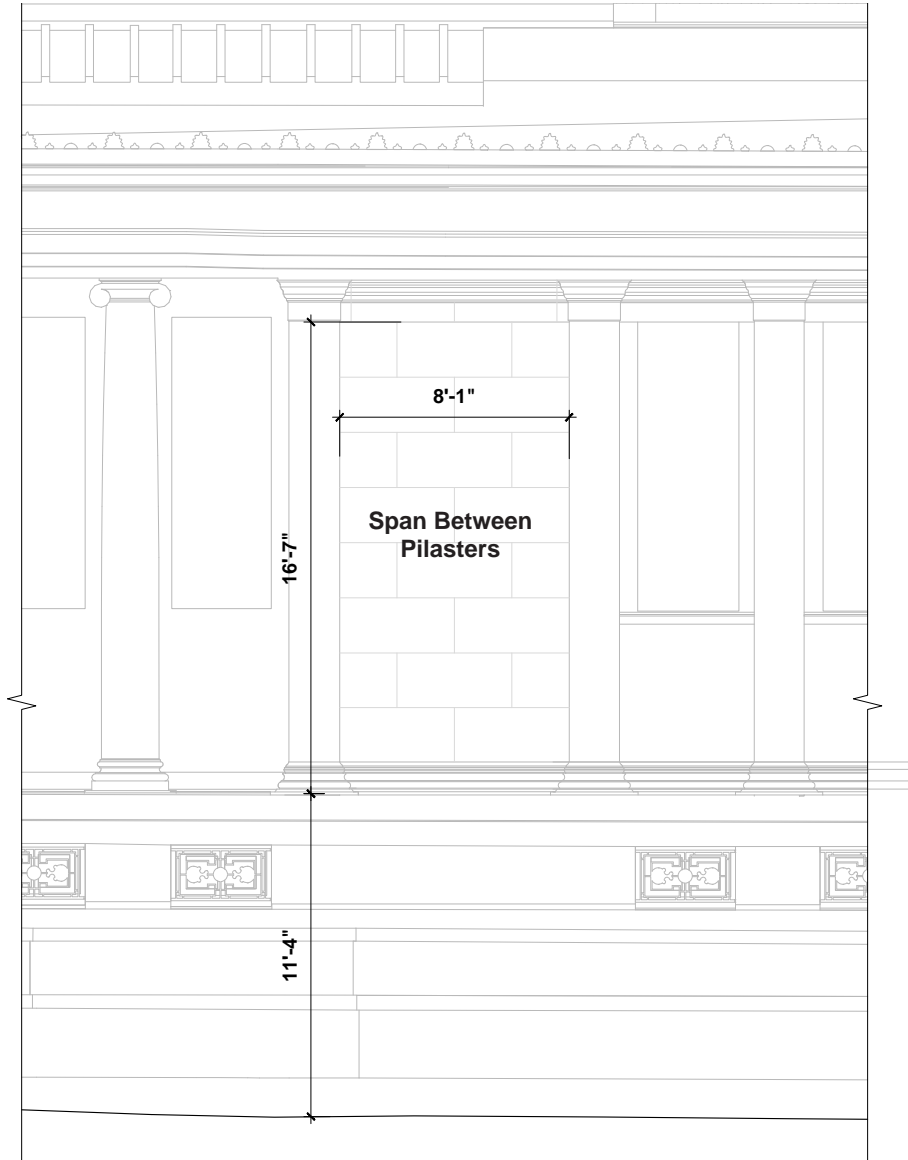
PROPOSED



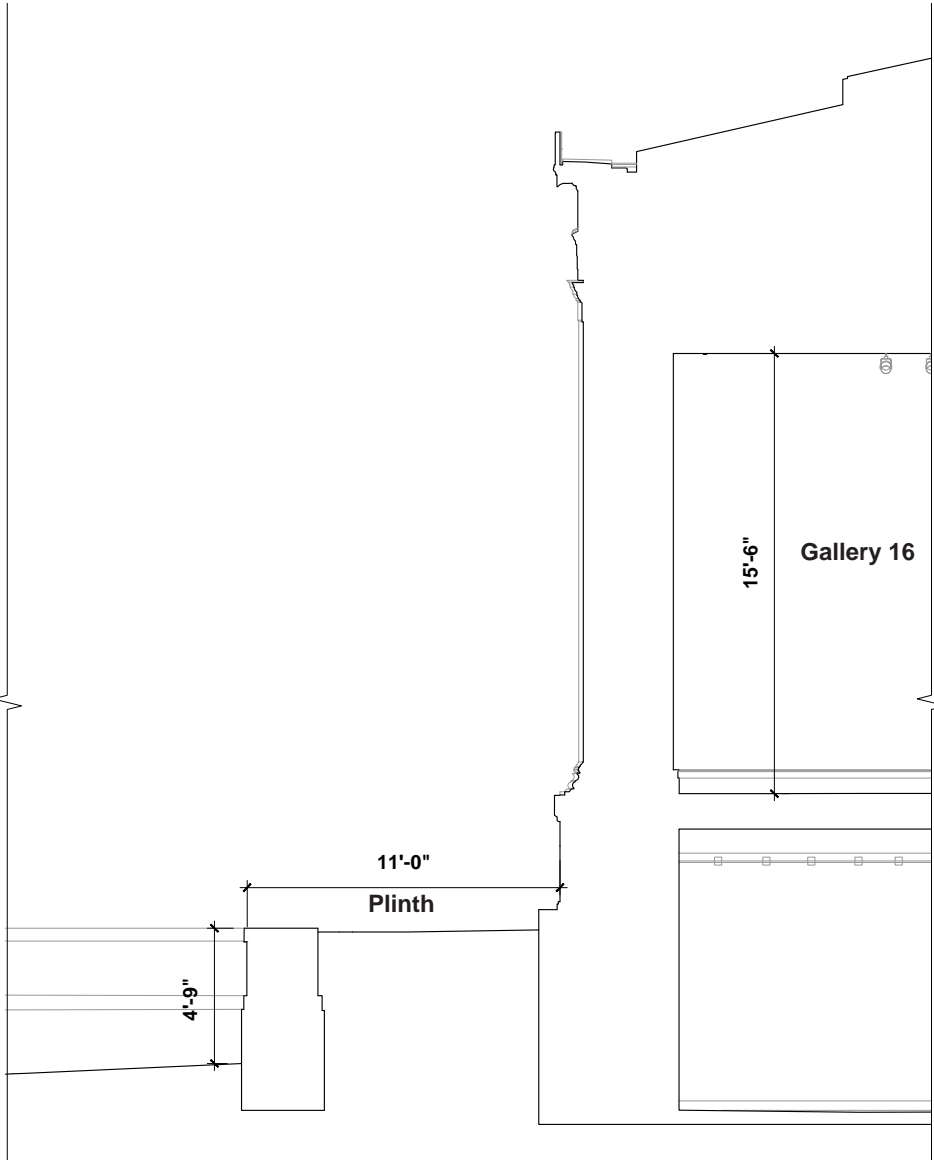
2. 1905 Bridge Connection

1905 NORTH BUILDING  
BRIDGE CONNECTION  
GALLERY LEVEL

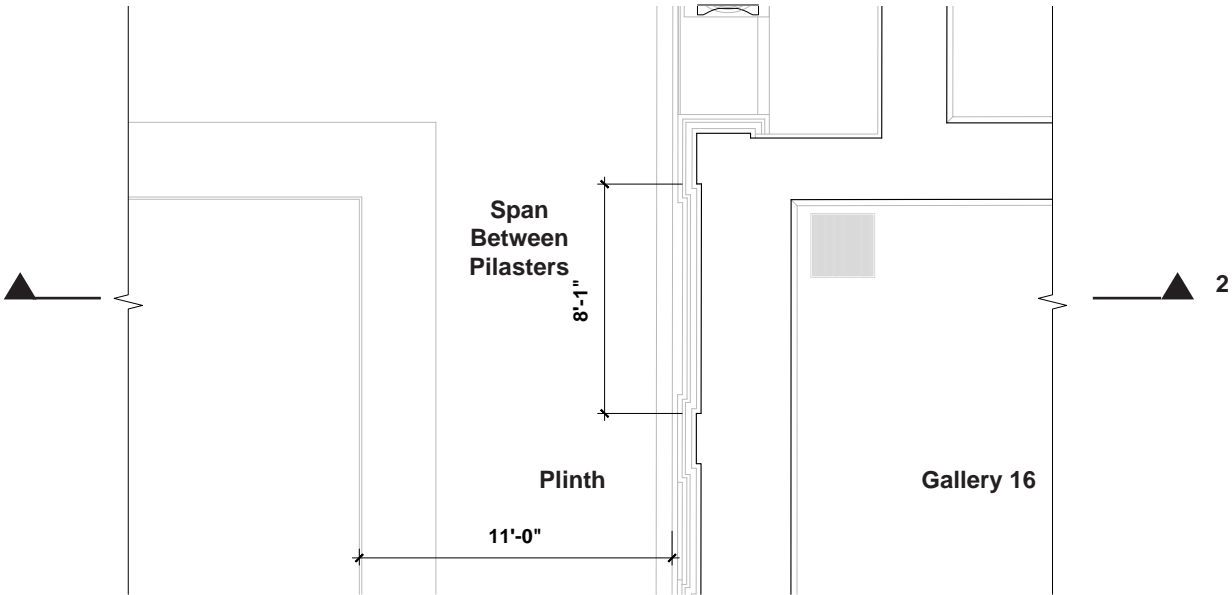
Drawings of Existing Conditions  
showing 1905 Building at North  
Elevation and Gallery 16



1. Existing North Elevation at 1905 Building



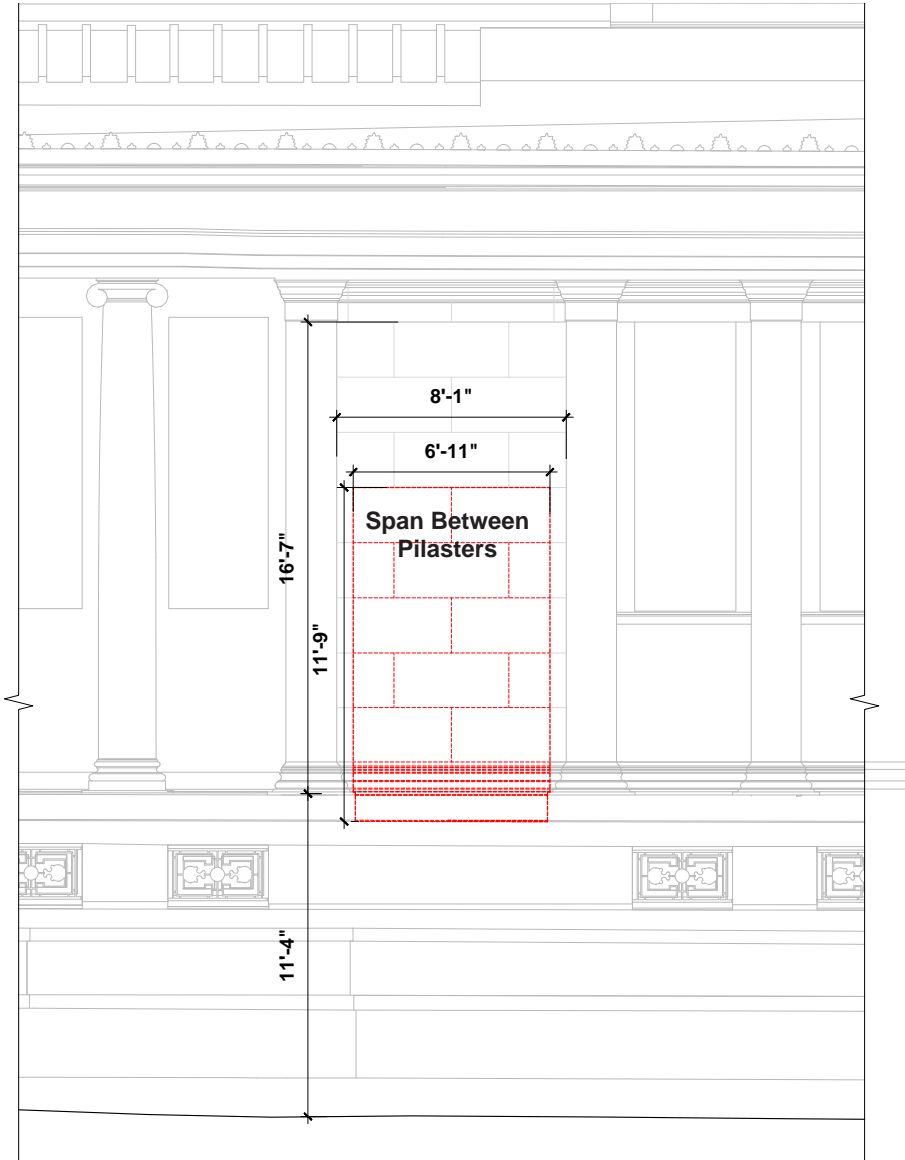
2. Longitudinal Section through North Wall of Gallery 16 at 1905 Building



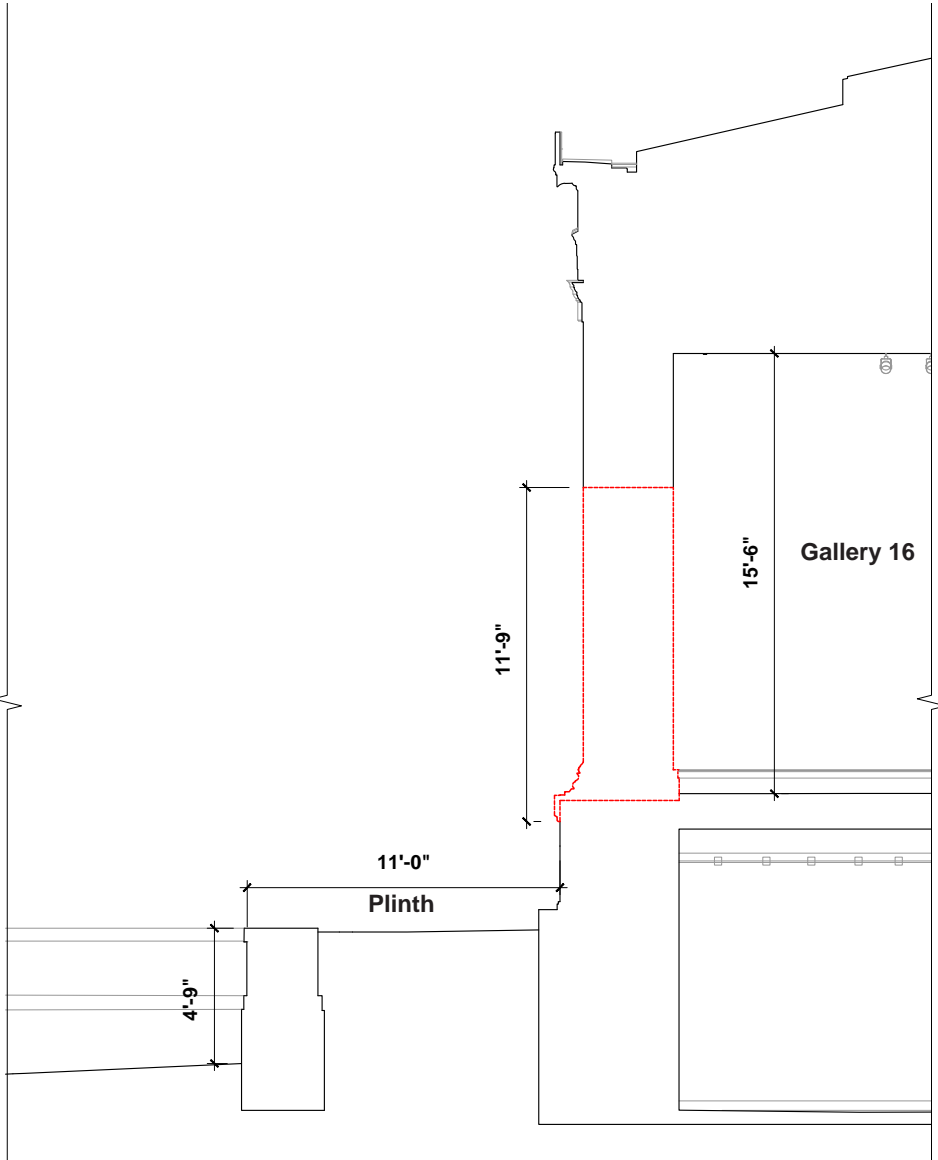
3. Plan at North-East Corner of Gallery 16 at 1905 Building

1905 NORTH BUILDING  
BRIDGE CONNECTION  
GALLERY LEVEL

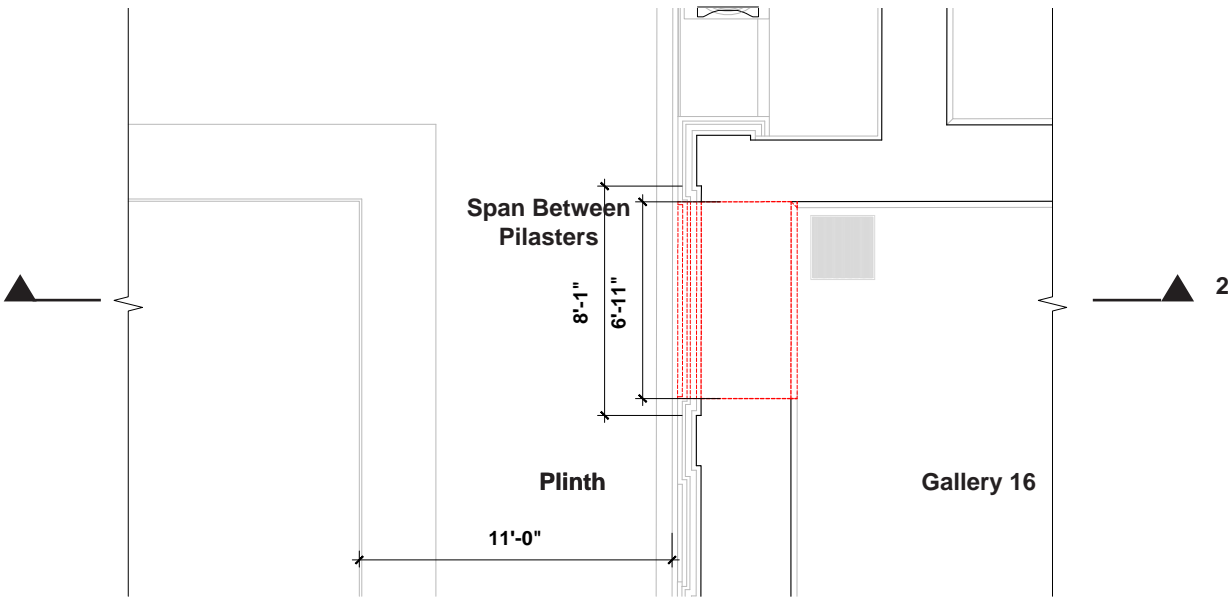
Drawings of Existing Conditions  
showing proposed removal of material  
at 1905 Building at North Elevation  
and Gallery 16 for Bridge insertion.



1. Selective Removal of North Elevation at 1905 Building



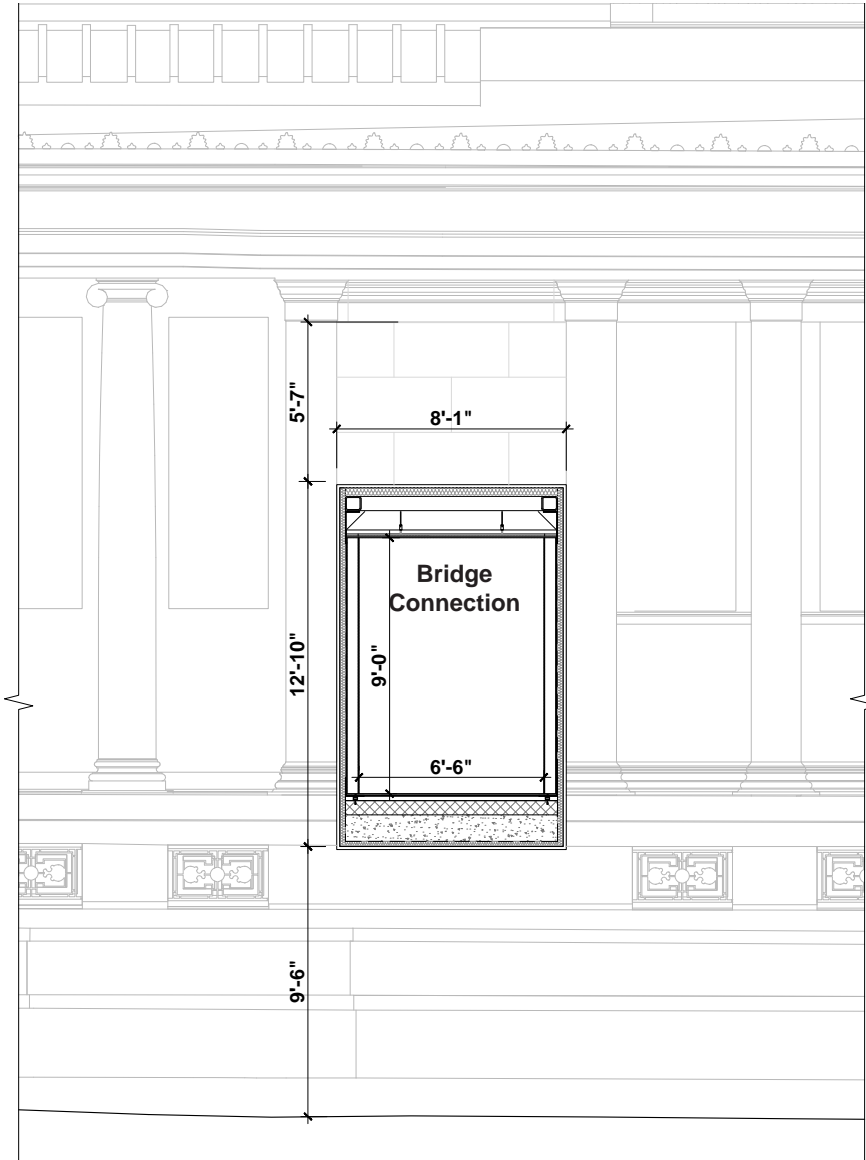
2. Longitudinal Section through North Wall of Gallery 16 at 1905 Building



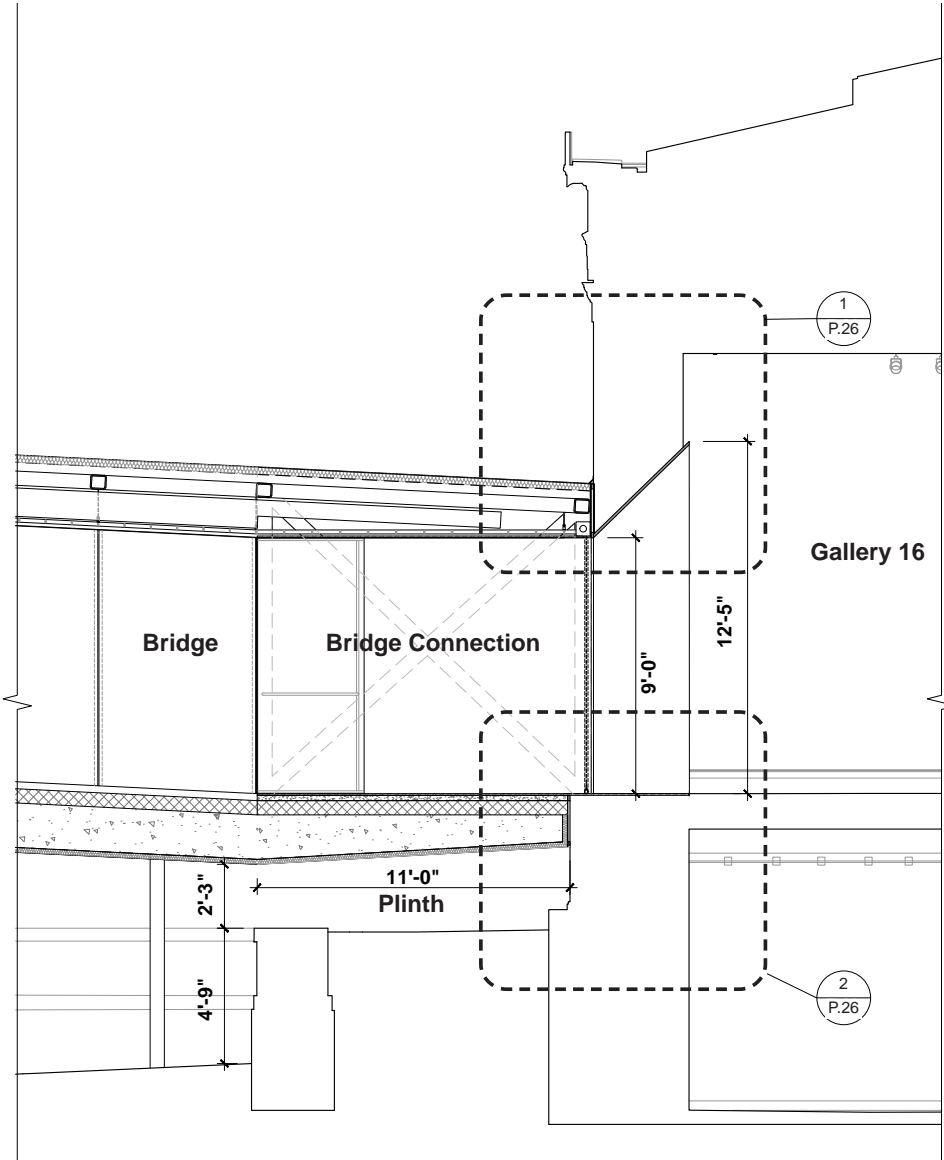
3. Plan at North-East Corner of Gallery 16 at 1905 Building

1905 NORTH BUILDING  
BRIDGE CONNECTION  
GALLERY LEVEL

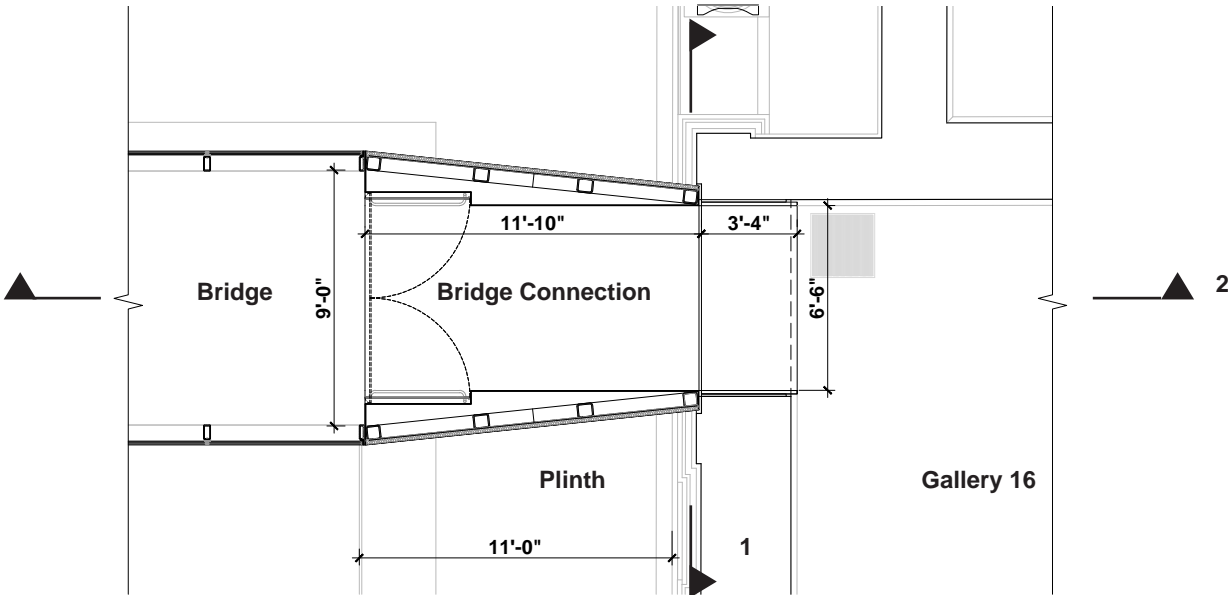
Drawings of Proposed Bridge  
Connection at 1905 Building.



1. Transversal Section of Bridge Connection at 1905 Building



2. Longitudinal Section at Bridge Connection at 1905 Building

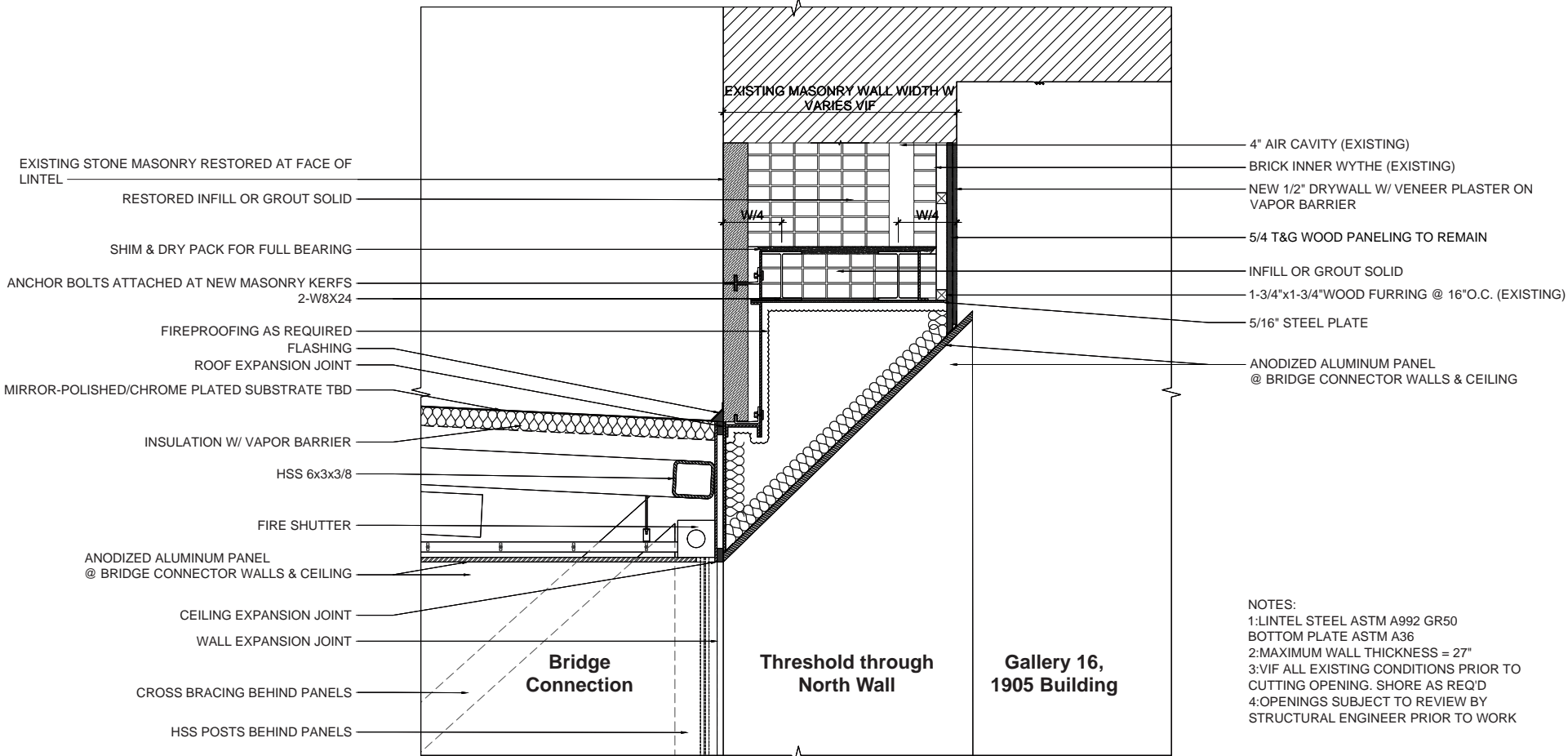


3. Plan at Bridge Connection at 1905 Building

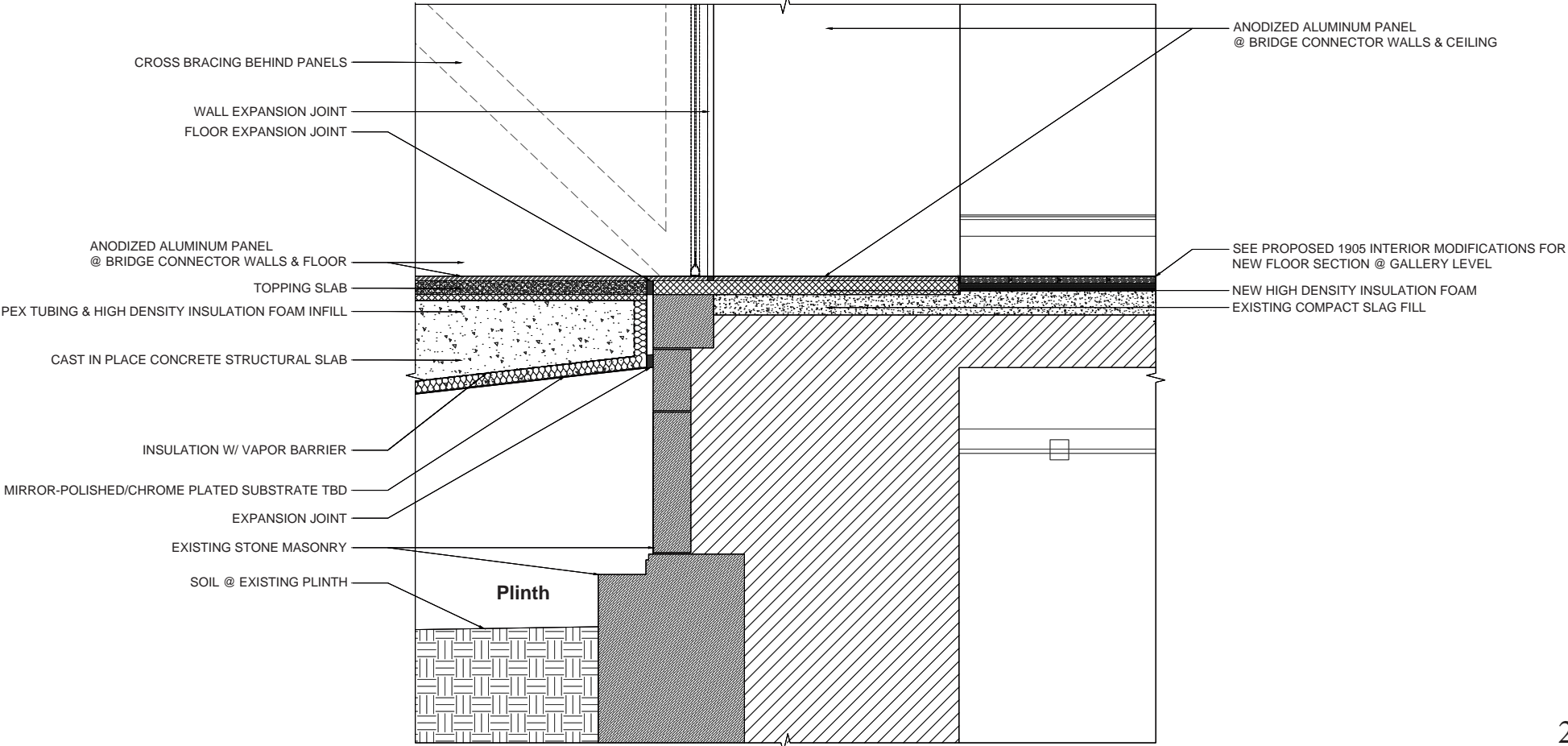
1905 NORTH BUILDING  
BRIDGE CONNECTION  
GALLERY LEVEL

Section Details of Proposed Bridge  
Connections at 1905 Building.

1. Section Detail at  
Top of Bridge Connection



2. Section Detail at  
Bottom of Bridge Connection





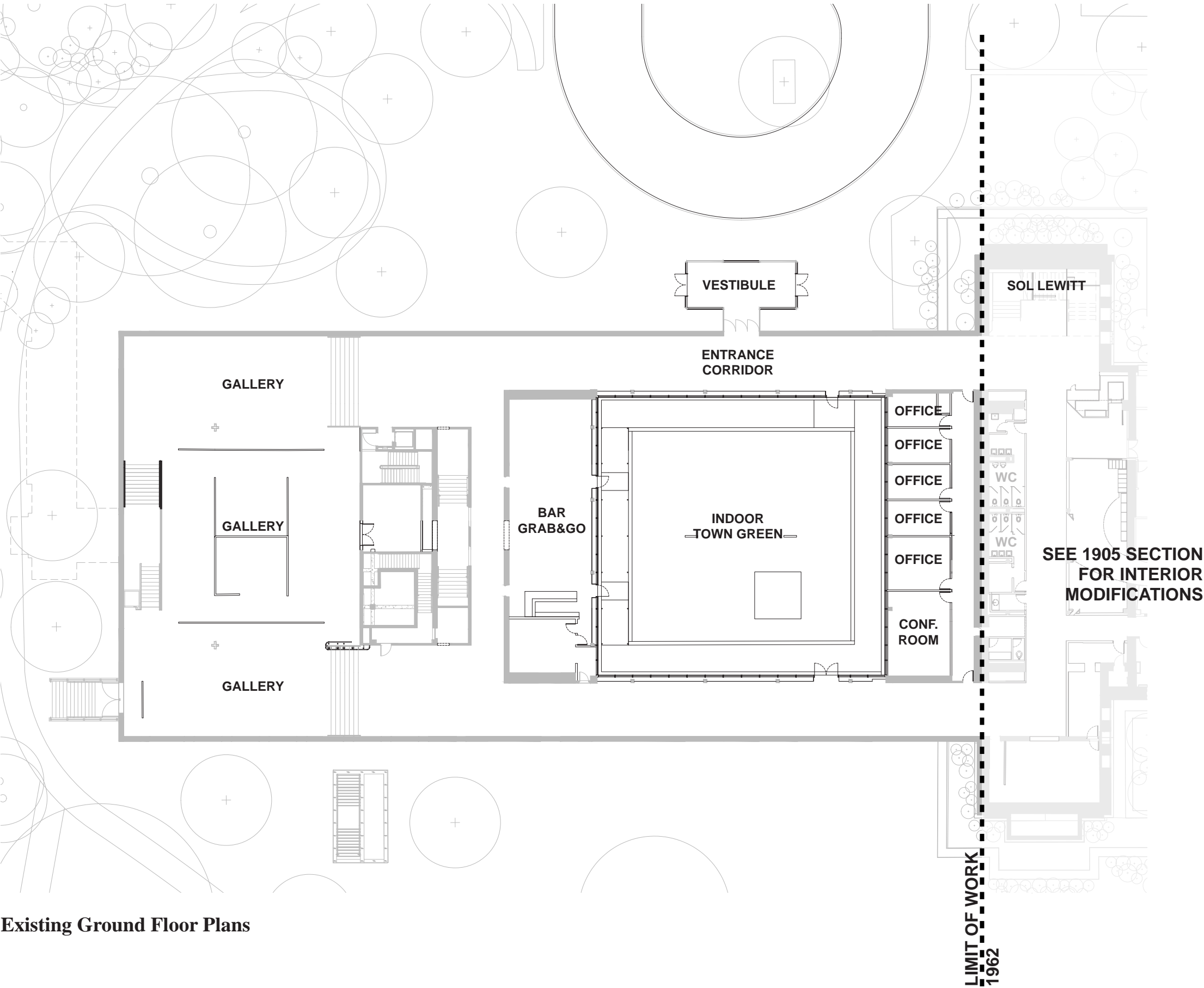
# 1962 BUILDING

1962 BUILDING

The 1962 Building is an approximately 30,000 square foot addition to the 1905 Building. It comprises a “black box” that houses an auditorium situated atop a marble-walled platform, which contains corridors that accommodate the bulk of the building’s functions. These functions include gallery space, a small restaurant several offices, and a large open-air Sculpture Garden.

A one-story aluminium and glass vestibule protruding from the western elevation serves as the museum’s entrance. The addition is split along its east-west axis into two equal sections. The northern half is defined by a large square Sculpture Garden that measures approximately 80 x 80 feet and is surrounded by aluminium and glass windows that look into the restaurant, exhibition galleries, and offices. The southern half is defined by the 80 x 80-foot “black box.” Much of the building’s original layout remains today, with two long hallways that double as gallery space alongside the east and west elevations of the building, a large staircase in the Northwest corner of the 1905 Building that was designed by Gordon Bunshaft to connect the two buildings, a large gallery space in the southern half of the building below the Auditorium, and a central Sculpture Garden flanked on its north and south sides by offices and a small restaurant, respectively. The offices and restaurant largely occupy their original footprint, though there have likely been material changes throughout both. The most intact space in the interior is the Auditorium, which is accessed by two long staircases and opens up into a large open volume enclosed by full-width glass curtain walls. A shallow stage is located at the center of the north side of the room, and approximately 10 to 12 rows of original chairs on slight risers extend from the stage to the back of the room. A small elevator and staircase were added at the western end of the stage.

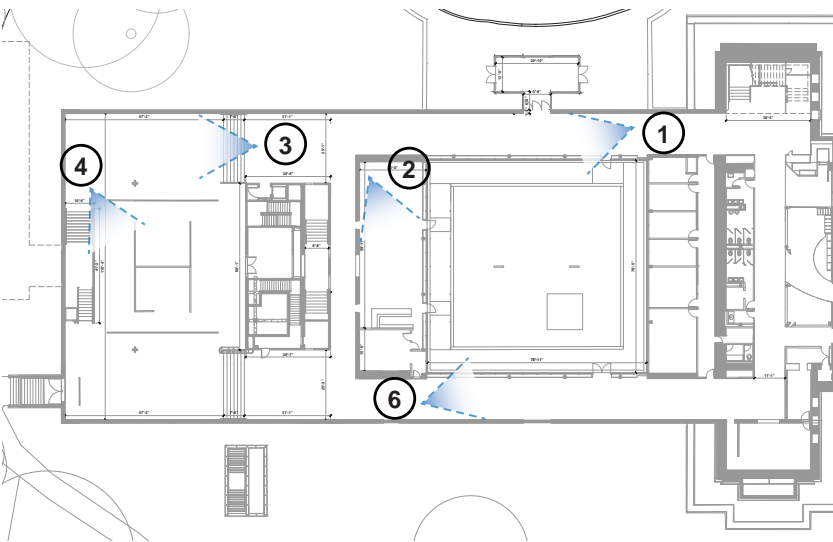
Existing Ground Floor Plans



1962 BUILDING

Photography of Existing 1962 Building

The inconsistency and variety of dimensions and shapes of the gallery spaces of the 1962 Building present a perpetual challenge. These galleries are either very long and narrow or rectangular. The majority of gallery space in the 1962 Building is in the corridors, where ceiling heights of 8 feet 11 inches do not permit installation of works taller than approximately 6 feet. This presents a significant limitation on the works that can be installed in these spaces, as many artists working after the 1950s did so on canvases that exceed 6 feet in height. Furthermore, it is difficult to provide for an appropriate viewing distance from larger works given the narrowness of the corridors, which measure 11 feet (north and south corridors) or 14 feet 9 inches wide (east and west corridors). The installation of sculpture in these corridors also causes jams in visitor flow that endanger the safety of artworks; sculptures could be knocked over by visitors in crowded spaces, and nearby paintings are at risk of touches and bumps.



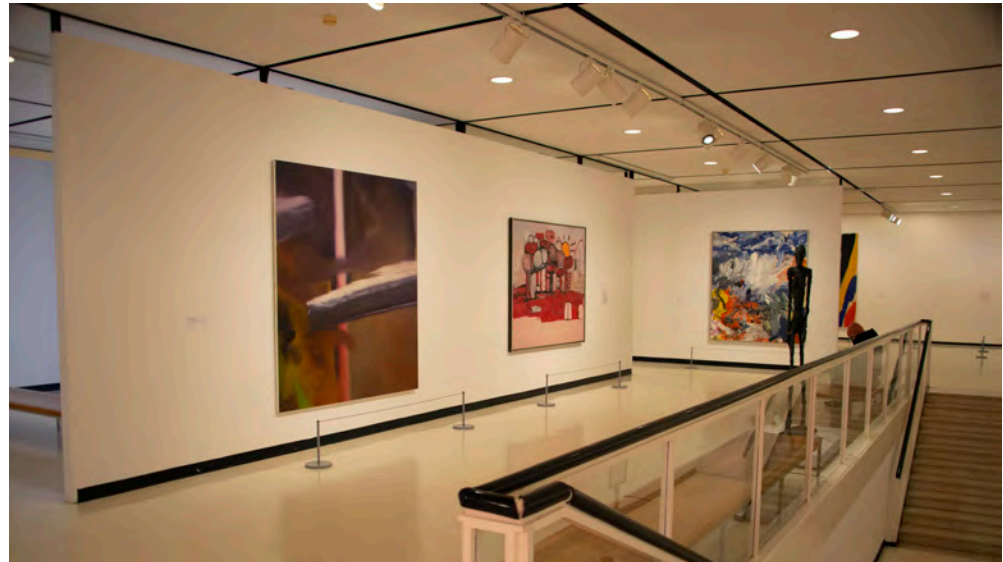
1. 1962 Building's Entrance Corridor



2. 1962 Building's Cafe



3. 1962 Building's West Corridor



4. 1962 Building's Gallery



5. 1962 Building's East Corridor



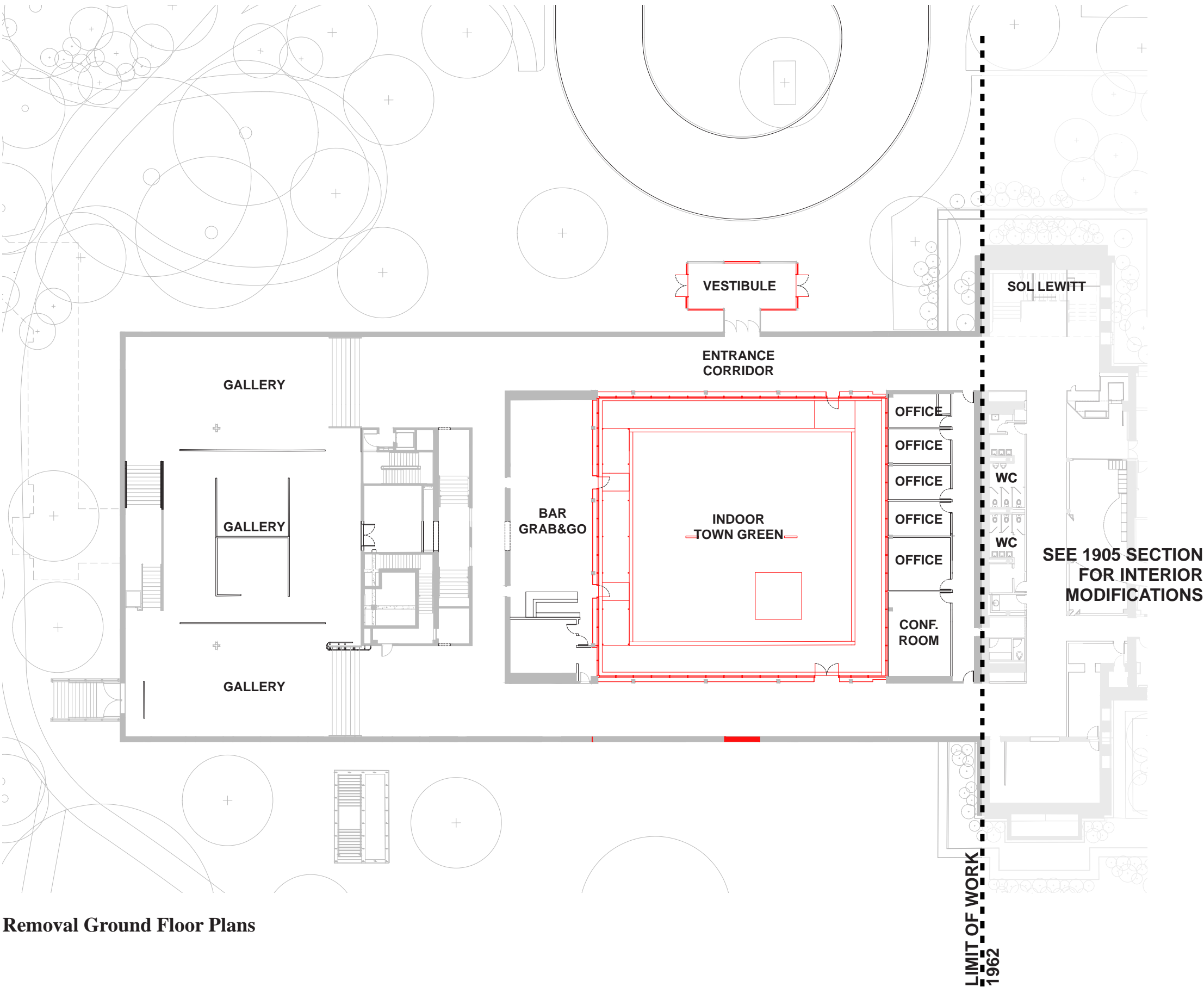
1962 BUILDING

Removal Ground Floor Plan

The Albright-Knox will continue to serve its historic purpose as an art museum and center for art education. Key to the continuation of these functions is the expansion of program spaces and the functional requirements to support them. Although the buildings have continued to be used as a museum, the use of the 1962 Building has changed.

While its original use orbited around the Auditorium and Members’ lounge and courtyard, we envision its uses to be expanded to include, along with the Auditorium, a free public indoor town green, a new education wing and a single upgraded 2000 sf exhibition space.

Changes proposed will dramatically increase the functionality and use of the 1962 Building, thus ensuring its viability and ongoing preservation. Additionally, the majority of the exhibition space in the 1962 Building is unable to accommodate the display of today’s larger artworks and their movement through the building for installation or to meet museum standards for visitor proximity to the art.



Removal Ground Floor Plans

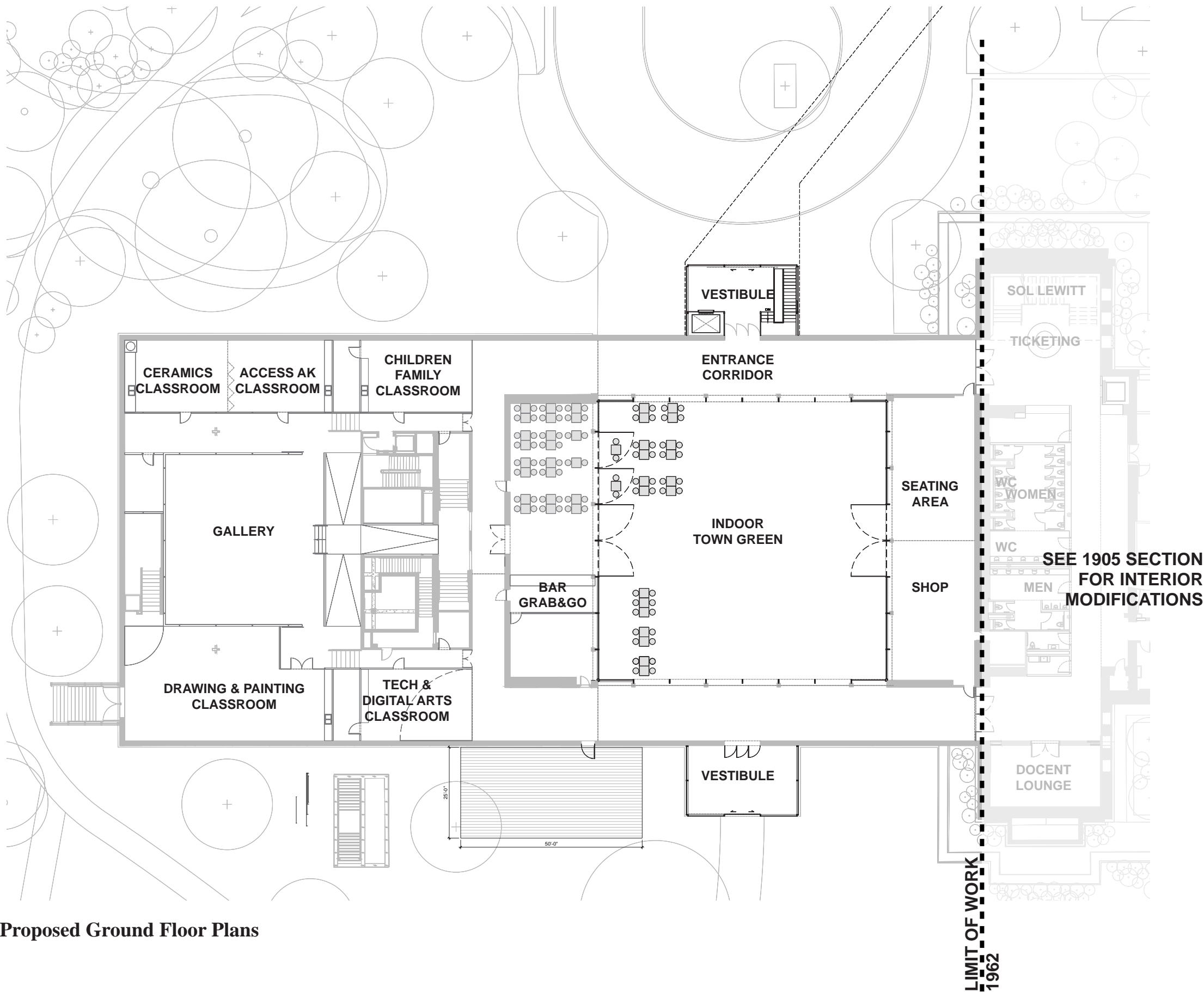
1962 BUILDING

Proposed Ground Floor Plan

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Proposed Ground Floor Plans

1962 BUILDING  
WEST VESTIBULE  
RECONSTRUCTION AND EXPANSION



## WEST VESTIBULE RECONSTRUCTION AND EXPANSION

### Existing West Vestibule

This existing vestibule—with its side-facing main doors and single, narrow opening into the museum will be extended to connect to the building and preserve the original marker. This extension is needed to accommodate accessible access from the new proposed tunnel that provides an accessible route to the new underground parking structure.

Crowds regularly back up and gather at the museum's entrance, especially in cold weather, which results in incidents of bumping, leaning, and touching artworks that endanger their safety and compromise the museum's ability to care for its collection.



1. 1962 West Vestibule - Watercolor rendering of Gordon Bunshaft's proposed addition to the Albright Art Gallery



2. 1962 West Vestibule - Elmwood Avenue Entrance to the 1962 Building



3. 1962 West Vestibule



1962 BUILDING  
WEST VESTIBULE RECONSTRUCTION  
AND EXPANSION

Existing West Vestibule Expansion

Images show side by side representation of existing West Vestibule and proposed expanded West Vestibule.

There are sliding glass doors proposed on the West Facade to facilitate entering on the East / West axis that now connects you to Delaware Park.

We intend to carefully dismantle by hand to the greatest extent possible and transfer the components of the historic West Vestibule to secure storage. The historic materials shown will be numbered and keyed into indexing diagrams to facilitate the re-instatement.

EXISTING



1A. 1962 Current West Vestibule - Northwest corner

PROPOSED



1B. Proposed West Vestibule - Northwest corner



2A. 1962 Current West Vestibule - From Elmwood Avenue



2A. Proposed West Vestibule - From Elmwood Avenue

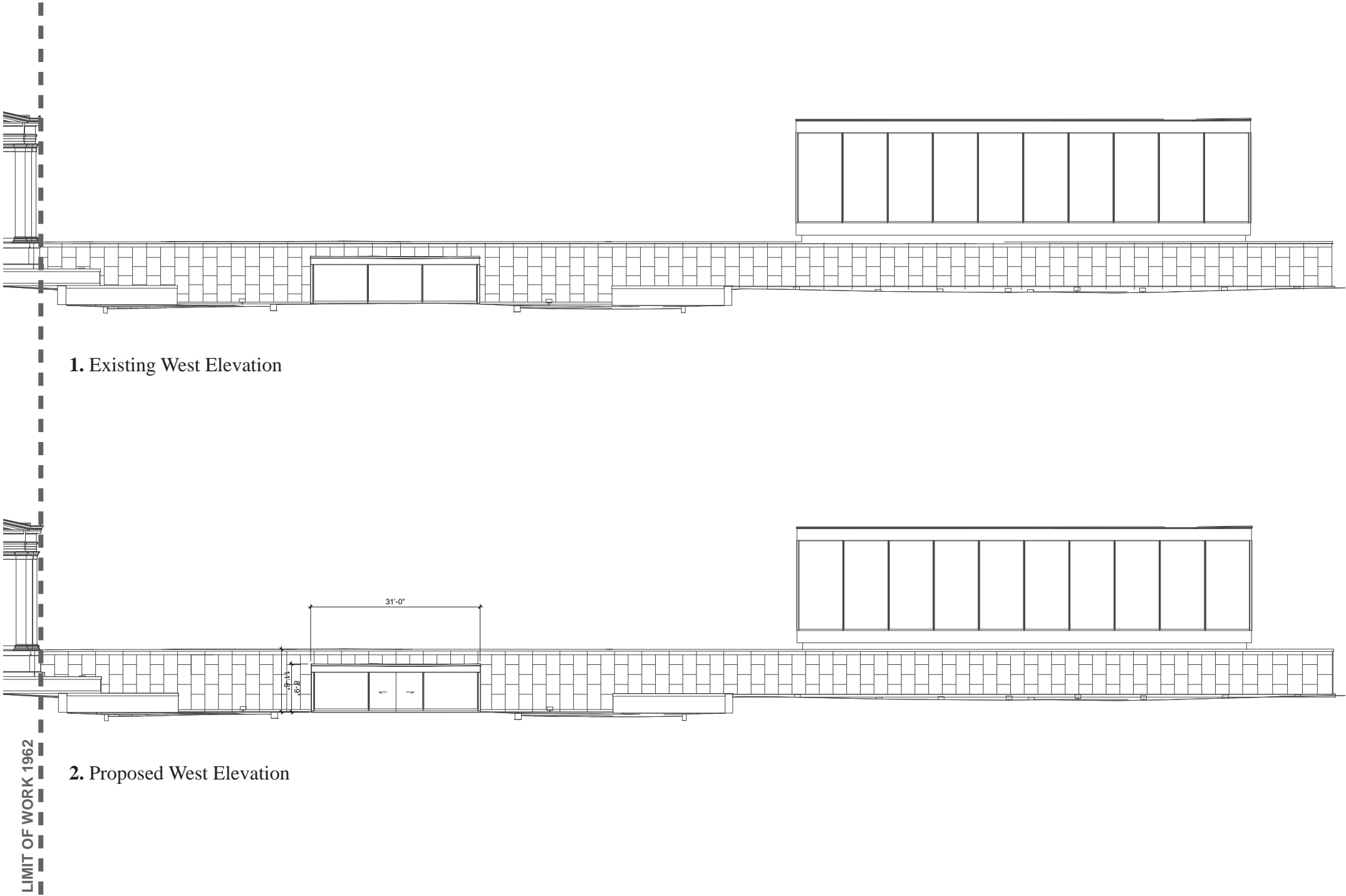


# 1962 BUILDING

## WEST VESTIBULE RECONSTRUCTION AND EXPANSION

### Existing West Vestibule Expansion

Existing and Proposed Section and Elevation drawings outlining the scope of the Reconstructed West Vestibule.



# 1962 BUILDING

## WEST VESTIBULE RECONSTRUCTION AND EXPANSION

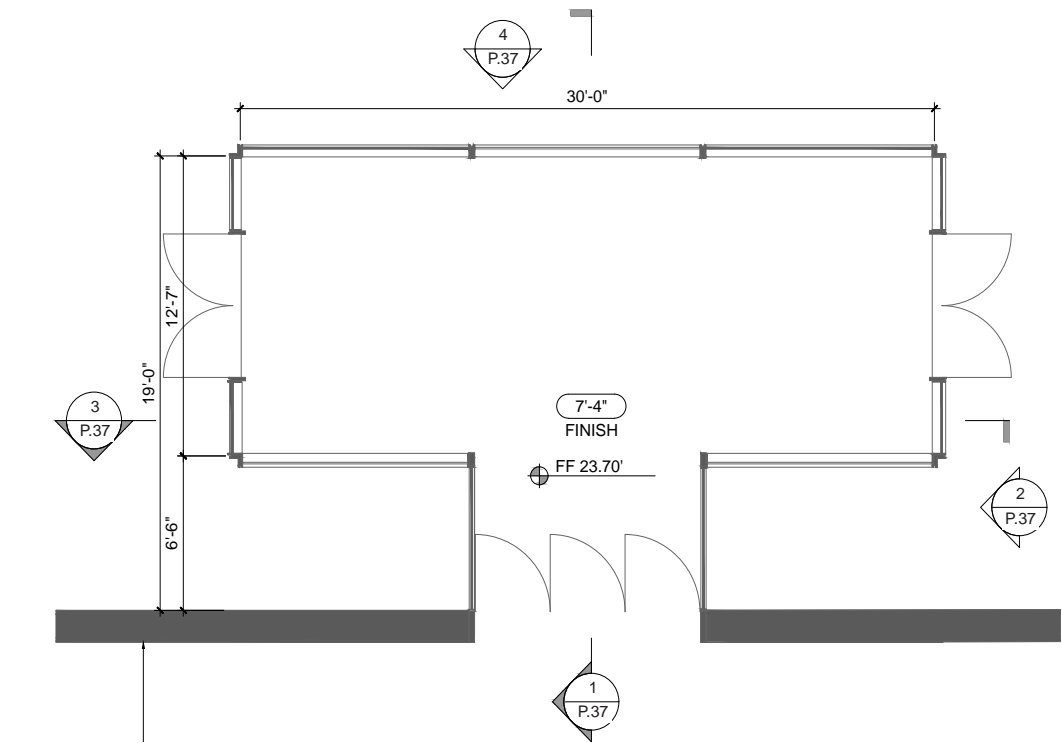
### Existing West Vestibule Expansion

Images show side by side representation of existing West Vestibule and proposed expanded West Vestibule.

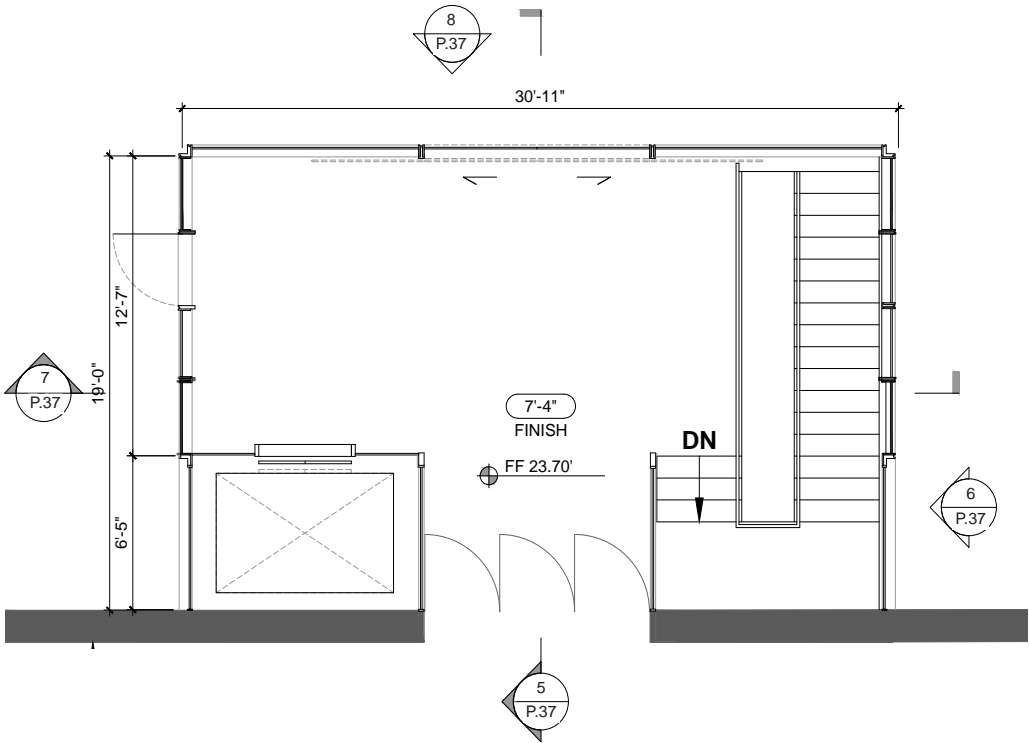
There are sliding glass doors proposed on the West Facade to facilitate entering on the East / West axis that now connects you to Delaware Park.

There are two proposed glazed panels that are added on the North and South to enclose the proposed new stair and elevator. These panels have been designed such that they are distinguishable from old work, but compatible with original materials and techniques.

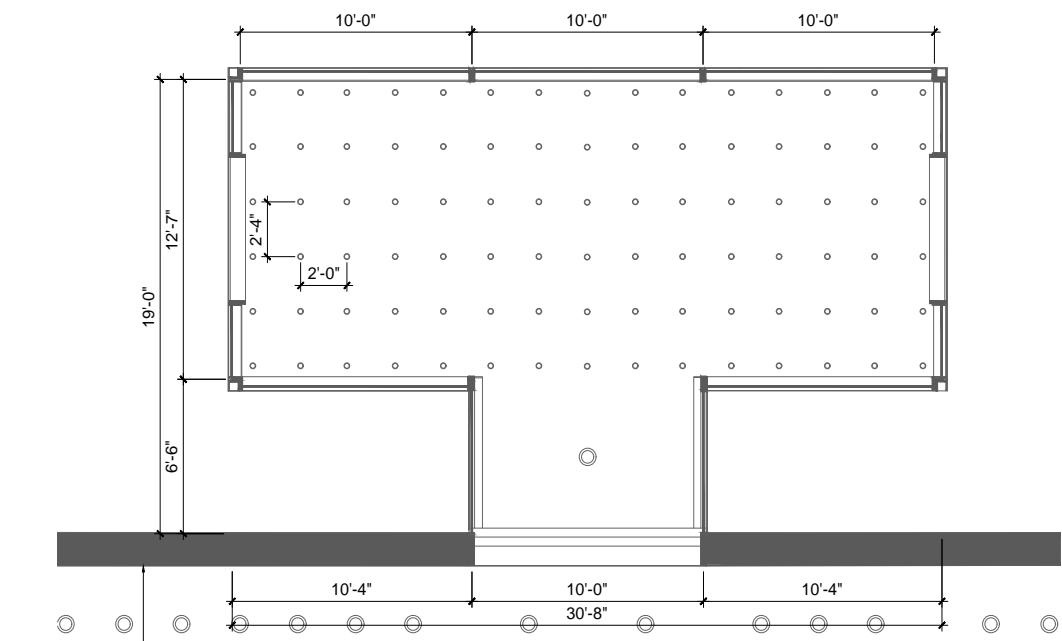
The proposed elevator, moving passengers from the new tunnel that leads to the parking structure, will be constructed of glass such that is a transparent cab in the vestibule. The location of the proposed stair was critical due to maintaining the existing date stone.



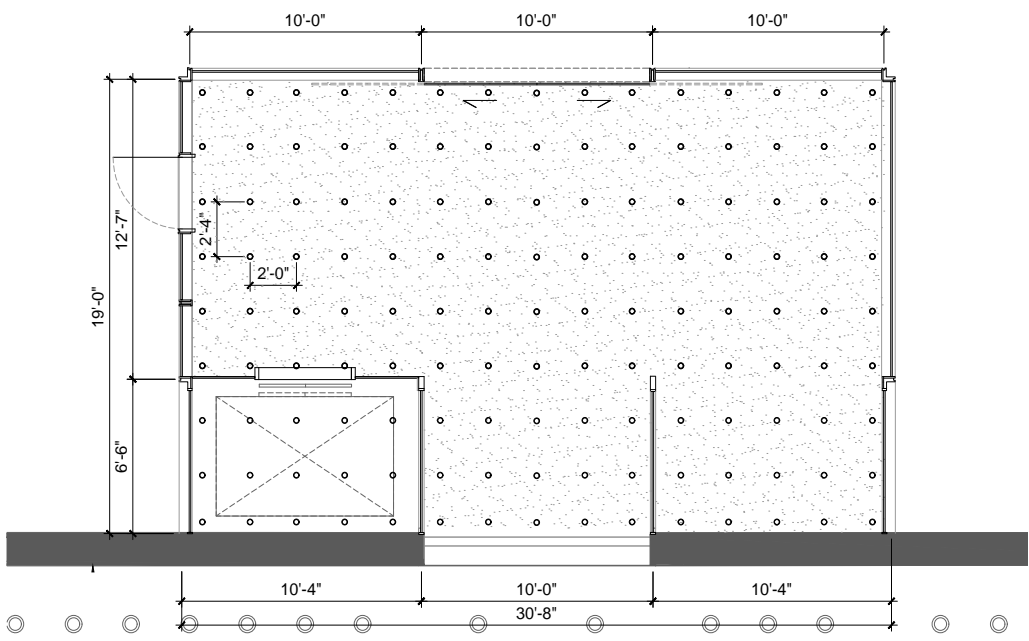
1. Existing Floor Plan



2. Proposed Floor Plan



3. Existing Reflected Ceiling Plan



4. Proposed Reflected Ceiling Plan

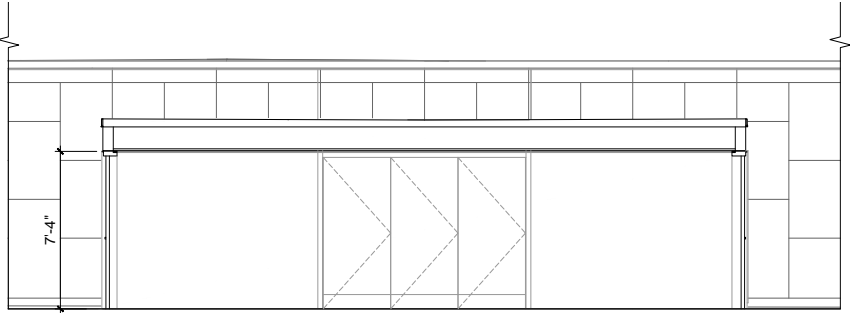
1962 BUILDING  
WEST VESTIBULE RECONSTRUCTION AND EXPANSION



1. Existing Section



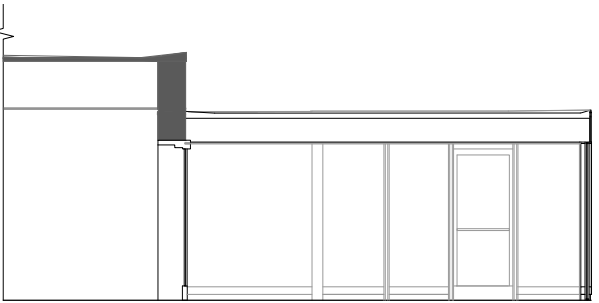
2. Existing Elevation



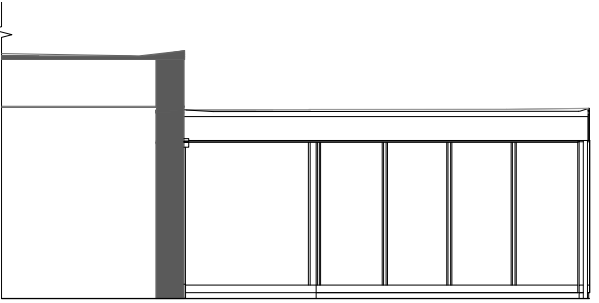
3. Existing Section



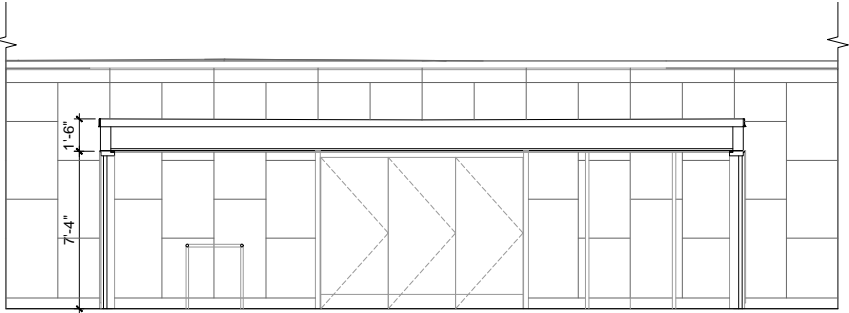
4. Existing Elevation



5. Proposed Section



6. Proposed Elevation



7. Proposed Section



8. Proposed Elevation

▼ 1962 ROOF EDGE  
EL. 34.83'

▼ 1962 UPPER LVL FL.  
EL. 23.70'

▼ 1962 ROOF EDGE  
EL. 34.83'

▼ 1962 UPPER LVL FL.  
EL. 23.70'

▼ 1962 ROOF EDGE  
EL. 34.83'

▼ 1962 UPPER LVL FL.  
EL. 23.70'

▼ 1962 ROOF EDGE  
EL. 34.83'

▼ 1962 UPPER LVL FL.  
EL. 23.70'

# 1962 BUILDING NEW EAST VESTIBULE AND EXTERIOR DOOR



# 1962 BUILDING

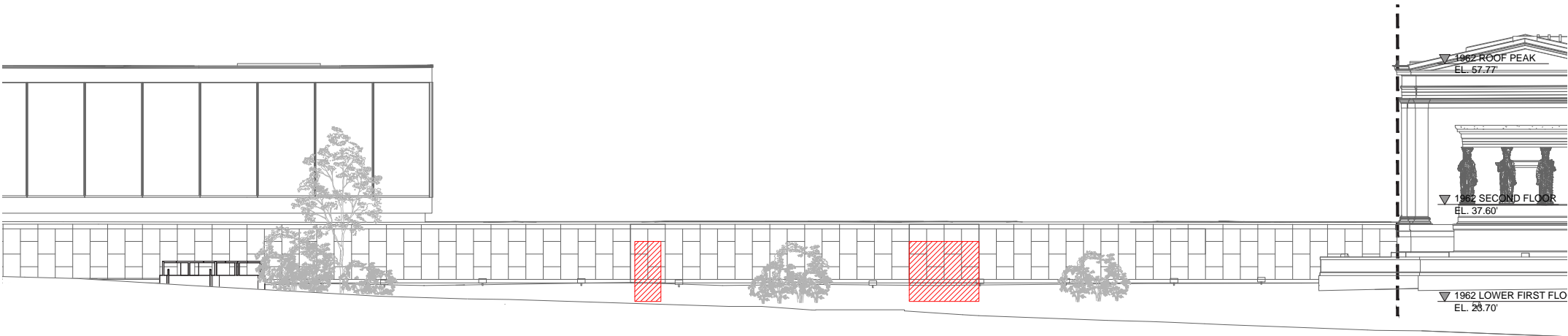
## NEW EAST VESTIBULE AND EXTERIOR DOOR

### New East Vestibule Expansion

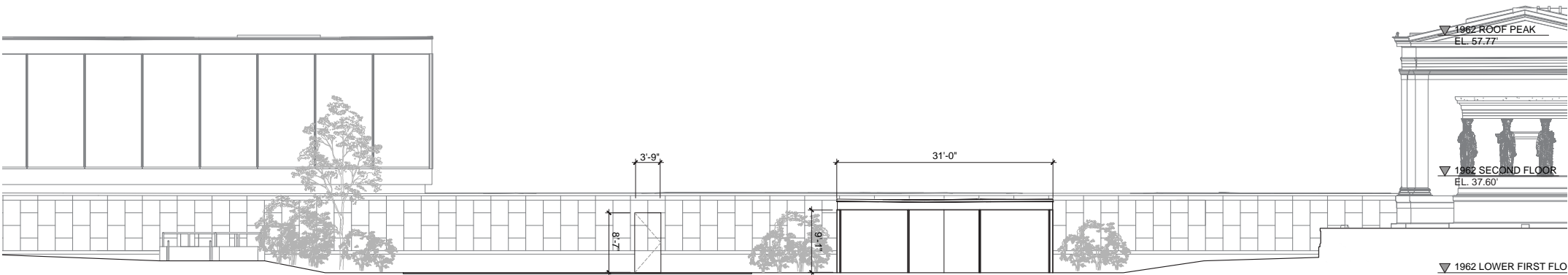
We propose a new Vestibule and Entrance Door on the East Facade in order to connect the East side of Delaware Park with the West Side that borders Elmwood Avenue, creating continuity of the park from East to West through the Indoor Town Green.

This connection was designed to be similar to, and on axis with, the West Vestibule, and requires new penetrations in the East Facade of the 1962 building.

We intend to carefully remove and store the existing marble facade panels for future repair work.



1. Existing East Elevation

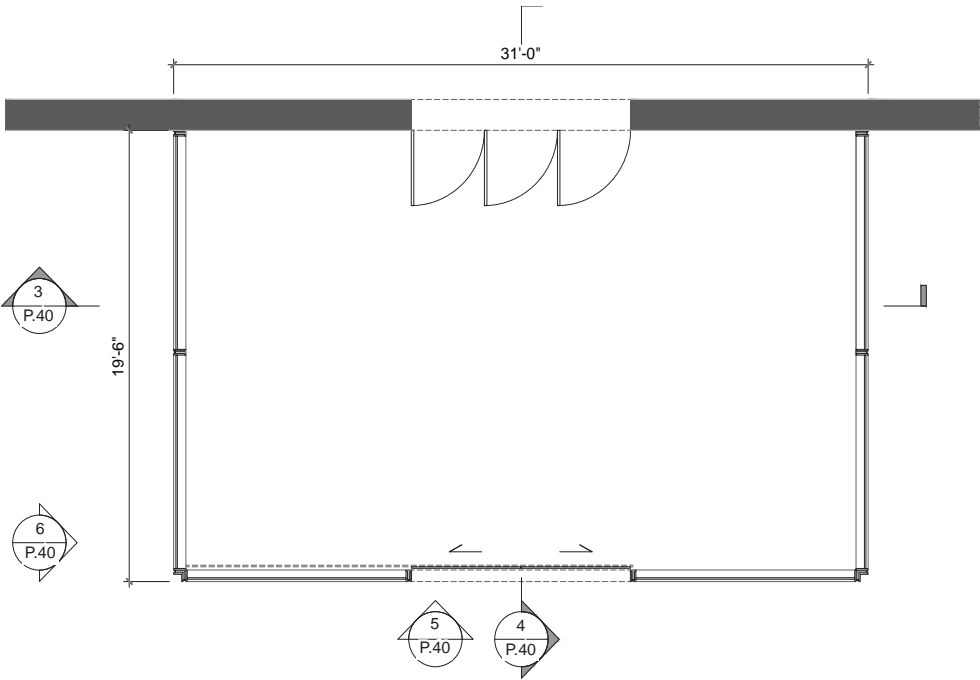


2. Proposed East Elevation

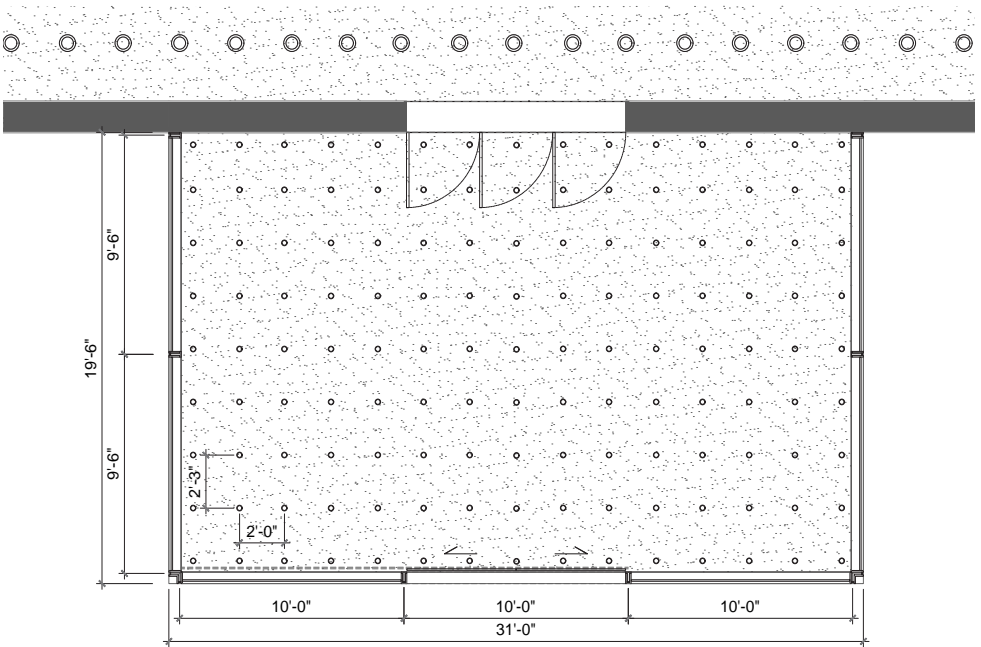
1962 BUILDING  
NEW EAST VESTIBULE

New East Vestibule Expansion

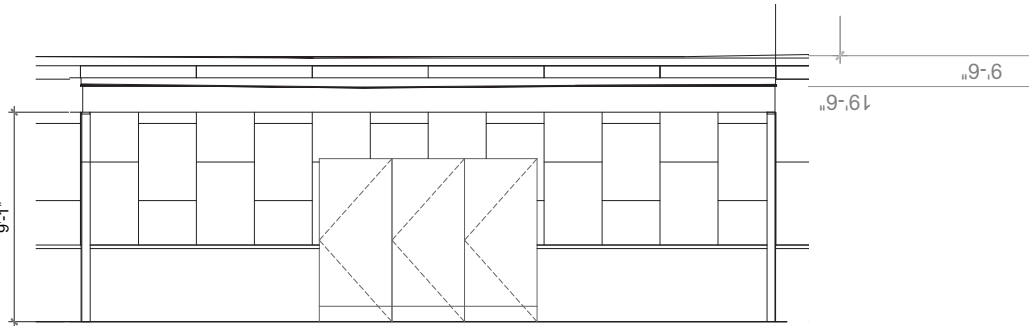
Proposed Plan, Ceiling Plan, Section and Elevations of New East Vestibule.



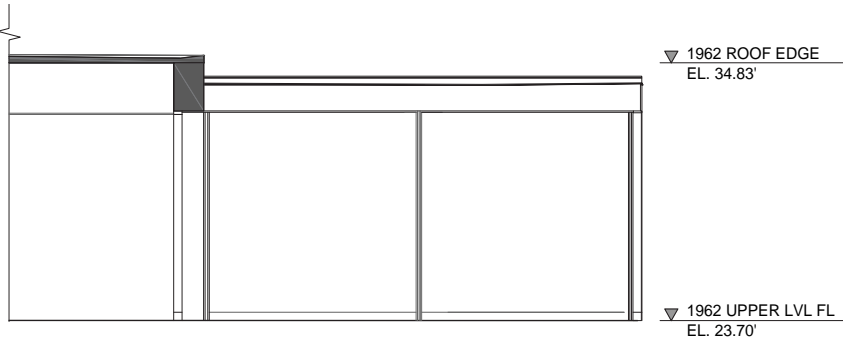
1. Proposed Floor Plan



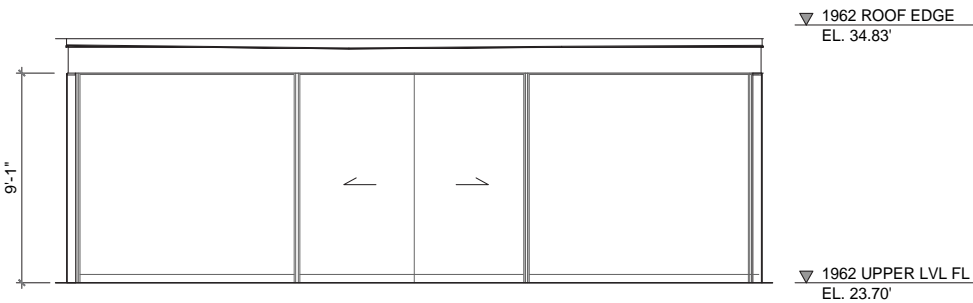
2. Proposed Reflected Ceiling Plan



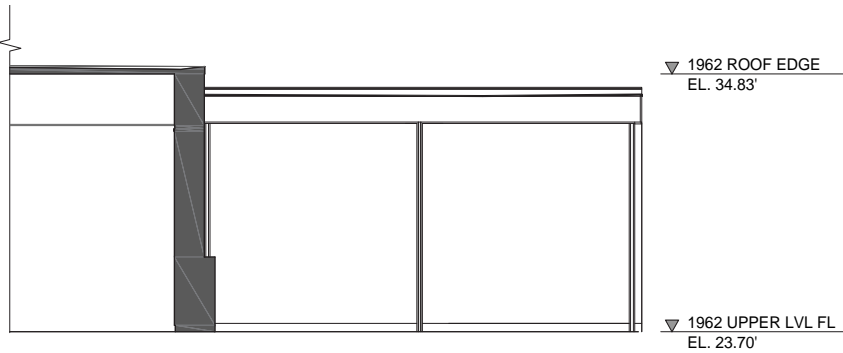
3. Proposed Section



4. Proposed Section



5. Proposed East Elevation



6. Proposed North Elevation

1962 BUILDING  
NEW EAST VESTIBULE  
AND EXTERIOR DOOR

New East Vestibule Expansion

Photograph and rendering of proposed New East Vestibule in context of the Existing 1962 and 1905 facade.

EXISTING



1A. 1962 Current East Wall, Northeast Corner



2A. 1962 Current East Wall

PROPOSED



1B. Proposed New East Vestibule, Northeast Corner

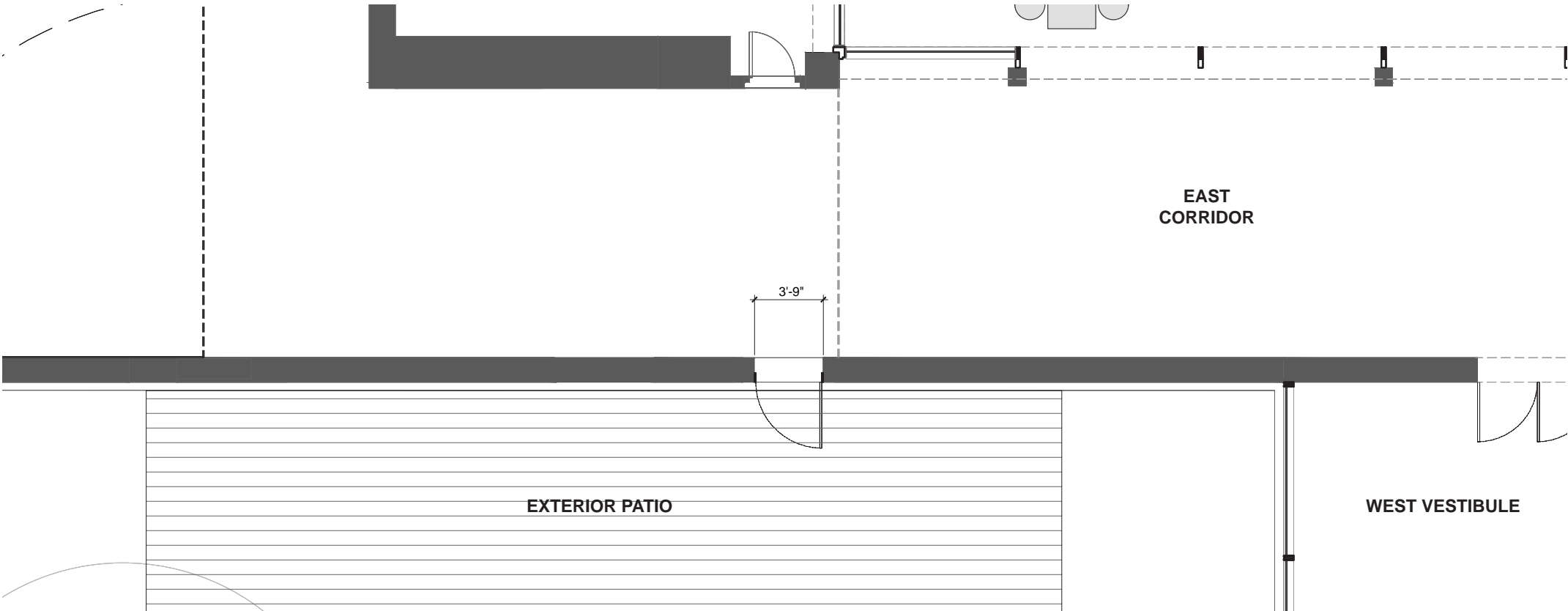


2B. Proposed New East Vestibule

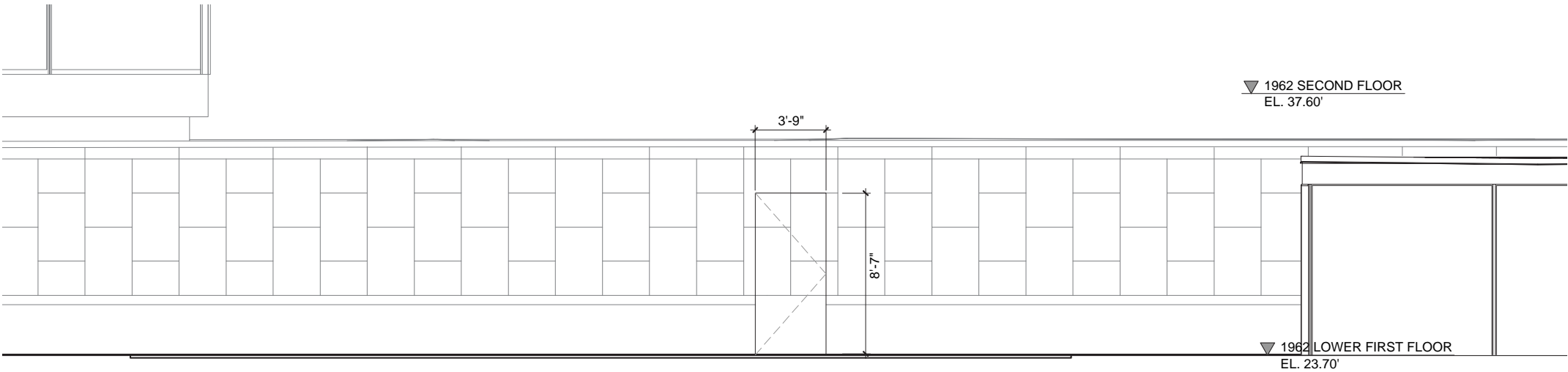
1962 BUILDING  
NEW EAST EXTERIOR DOOR

New East Exterior Door

Plan and elevation of proposed new door  
on East Facade.



1. Proposed East Exterior Door Plan



2. Proposed East Exterior Door Elevation



1962 BUILDING  
NEW EAST VESTIBULE  
AND EXTERIOR DOOR

New East Exterior Door

Photograph and Rendering of proposed new door on East Facade.

The door is intended to be clad in the same marble to minimize the visual impact on the facade.

EXISTING



1A. Existing East Exterior Wall of 1962 building

PROPOSED



1B. Proposed East Exterior Door to Patio

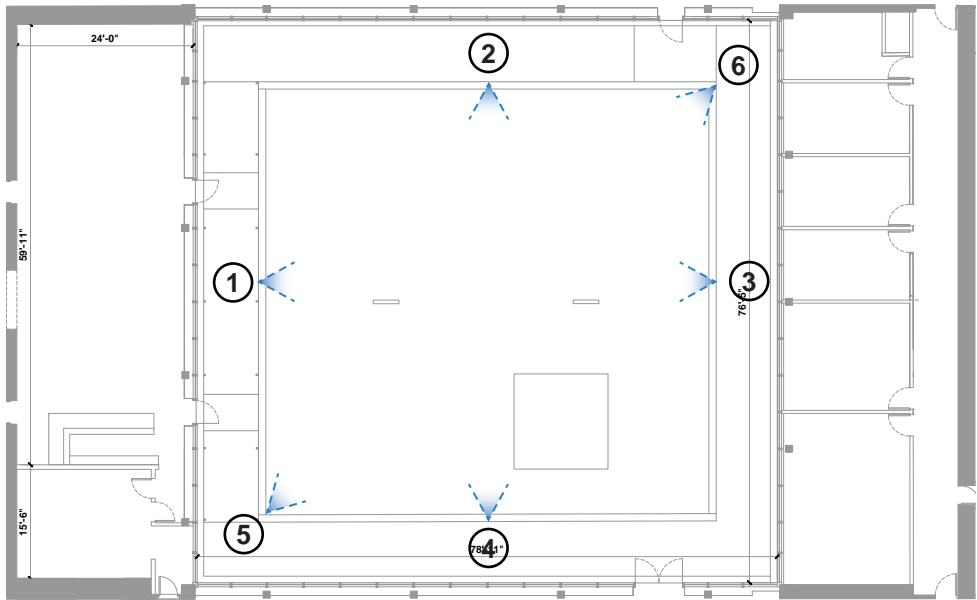
1962 BUILDING  
COURTYARD  
INDOOR TOWN GREEN



# 1962 BUILDING COURTYARD

## 1962 Photography of Existing Exterior Courtyard

The Sculpture Garden, in its original and current configuration, was never fully functional, due to Buffalo’s climate. Changes proposed will dramatically increase the functionality and use of the 1962 Building, thus ensuring its viability and ongoing preservation. We propose to do this by creating a welcoming, beautiful, calming, and inspiring Indoor Town Green that serves as a free space for visitors that extends the public space of the surrounding Delaware Park into and through the 1962 building.



EXISTING CONDITION PHOTOGRAPHY KEY PLAN



1. 1962 Courtyard looking North



2. 1962 Courtyard looking West



3. 1962 Courtyard looking South



4. 1962 Courtyard looking East



5. 1962 Courtyard looking North-West

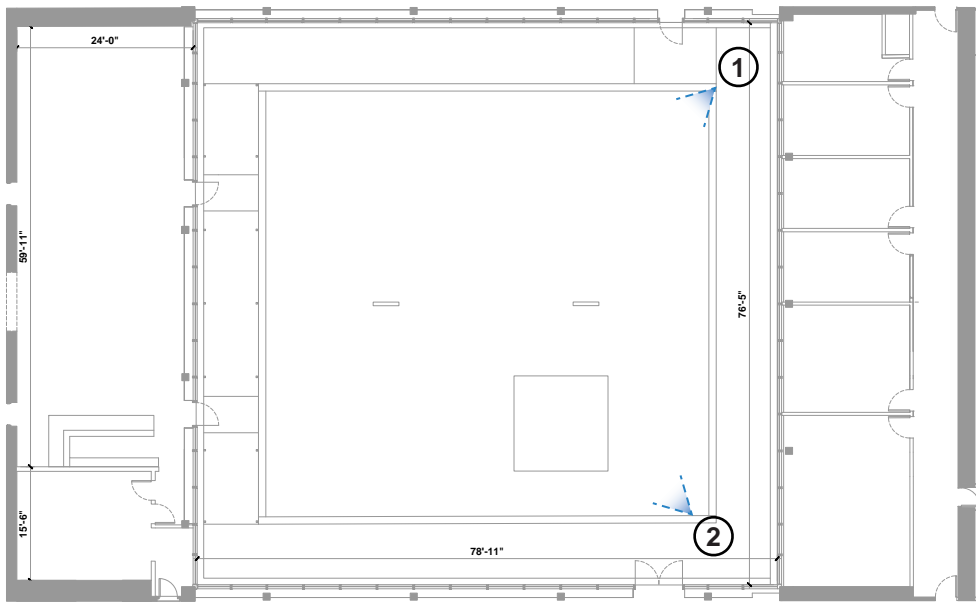


6. 1962 Courtyard looking North-West



1962 BUILDING COURTYARD

1962 Photography of SOM Building Courtyard



SOM BUILDING COURTYARD PHOTOGRAPHY KEY PLAN



1. 1962 Building Courtyard Floor

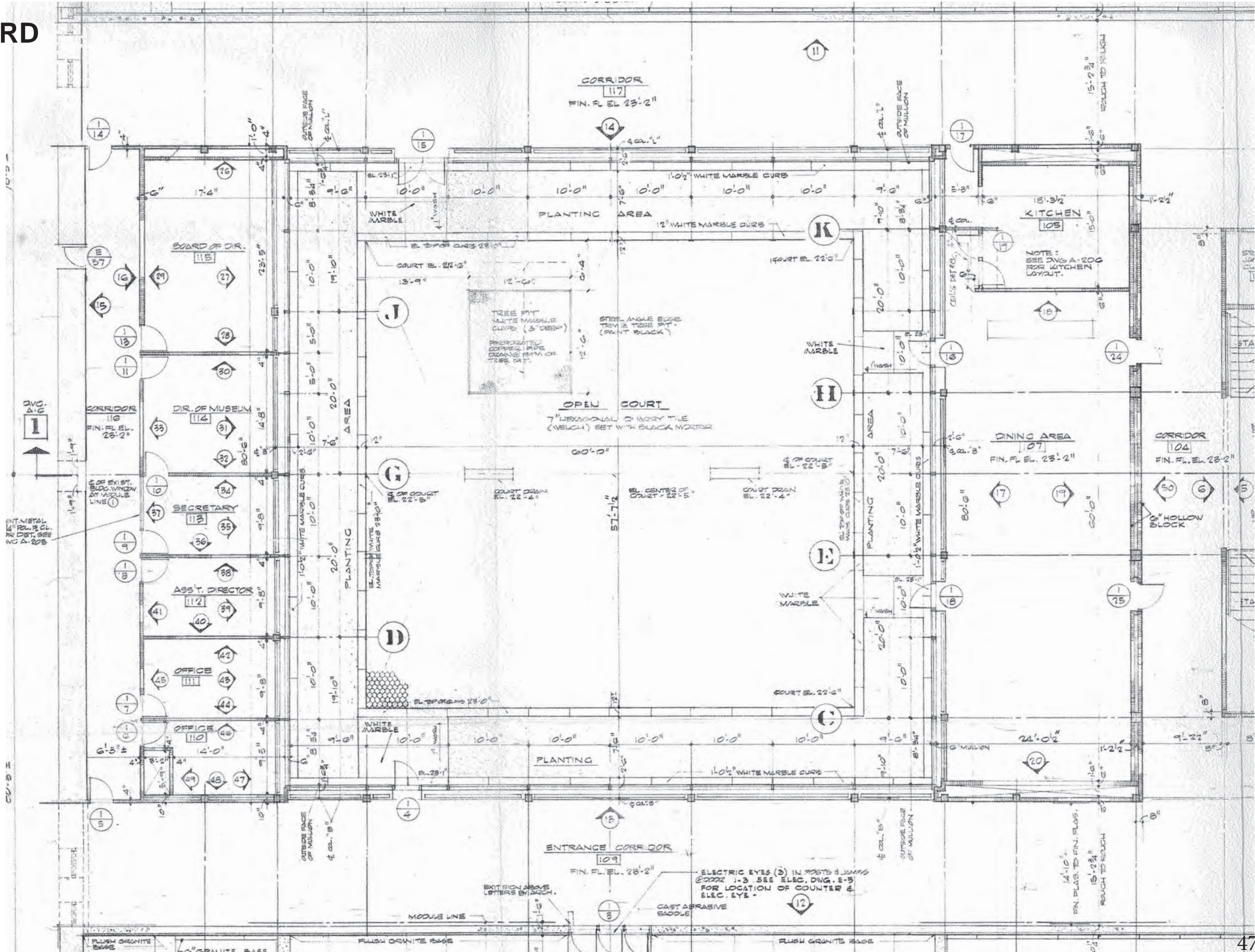


2. 1962 Building Courtyard Floor



1962 BUILDING COURTYARD

1962 SOM Building Courtyard Plan

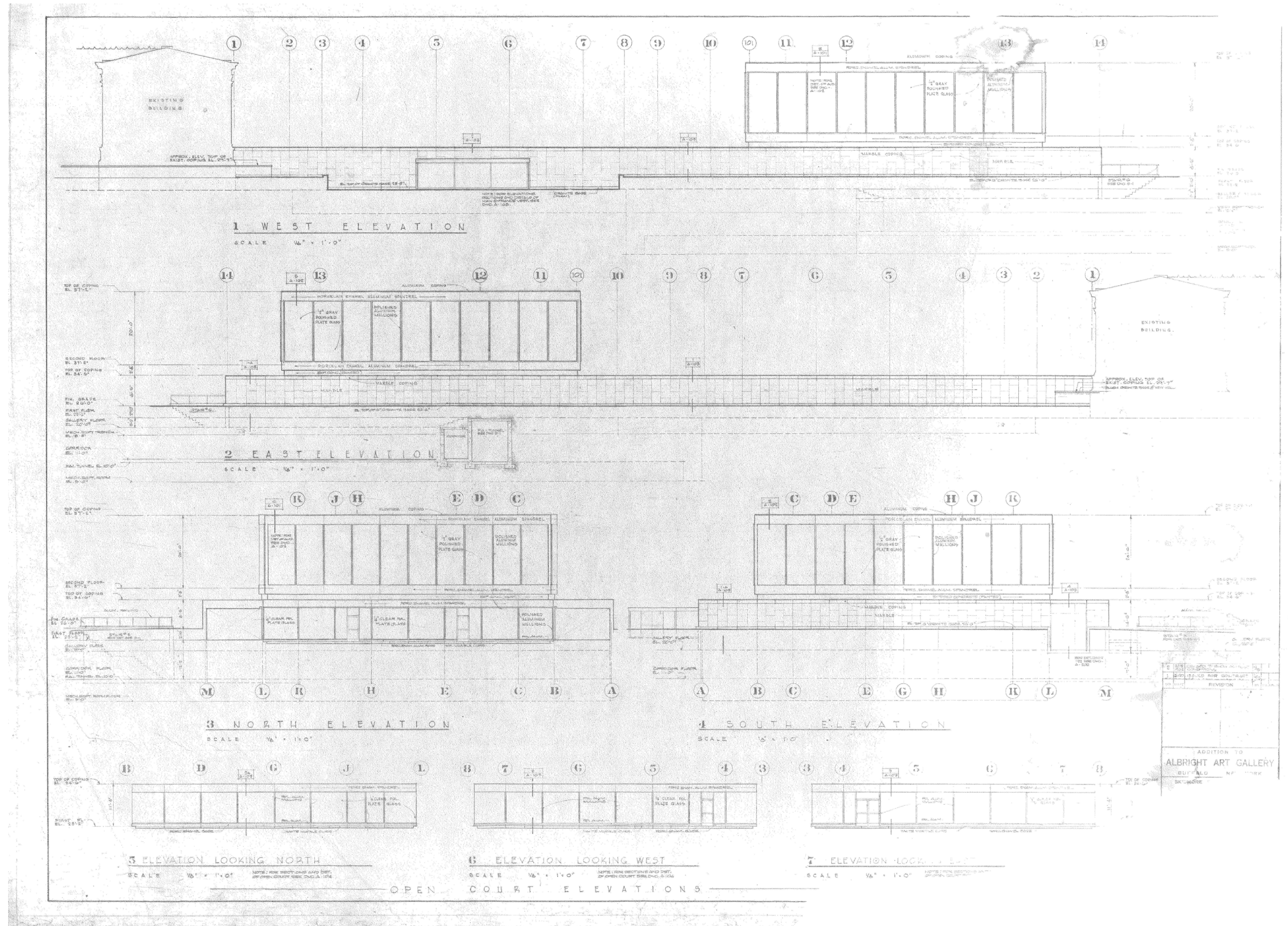




## 1962 BUILDING COURTYARD

## 1962 Historic Documentation of SOM Curtainwall Elevations

Historic drawings that guide the re-instatement of the original facade modulation that was modified in the late 1990's.

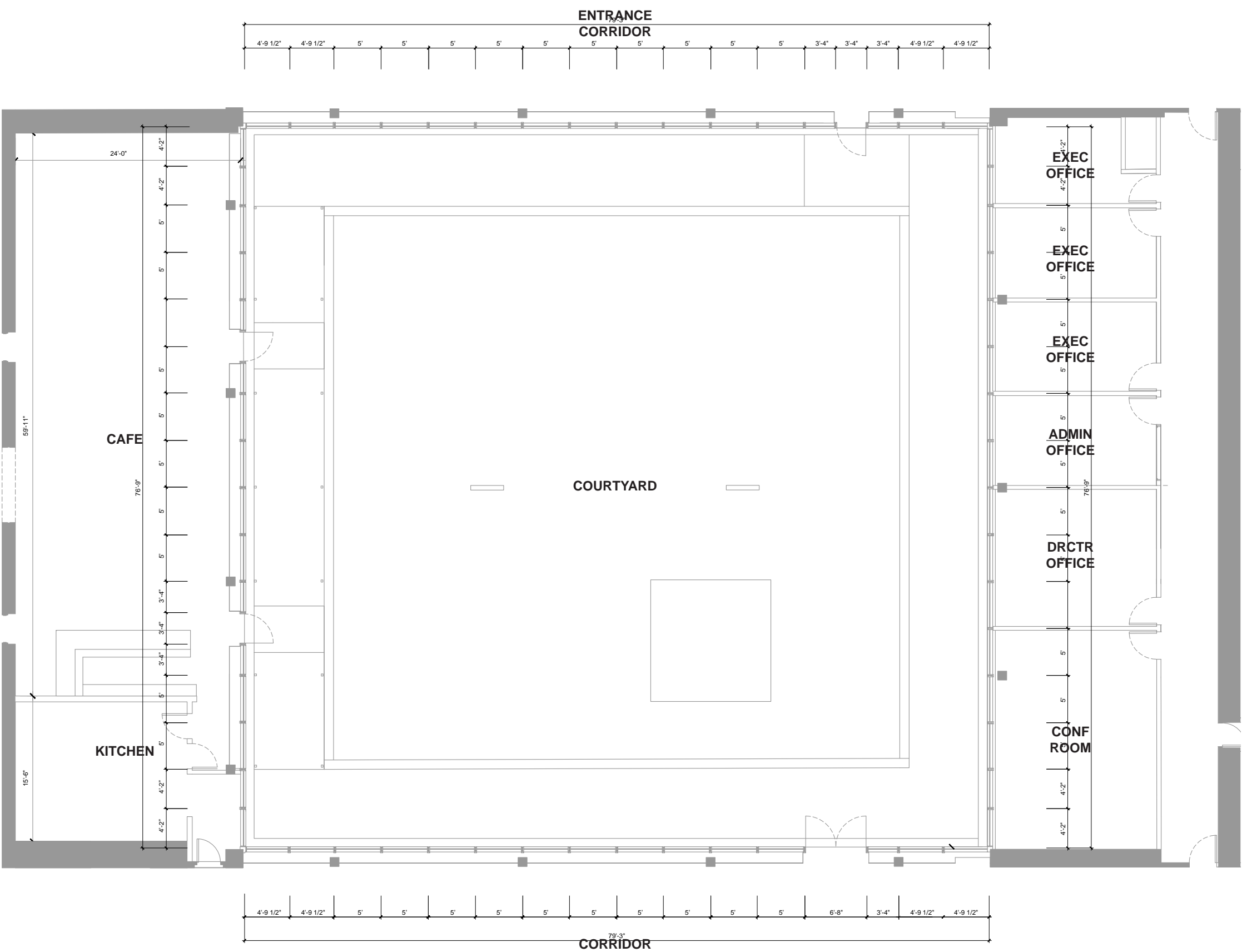




1962 BUILDING COURTYARD

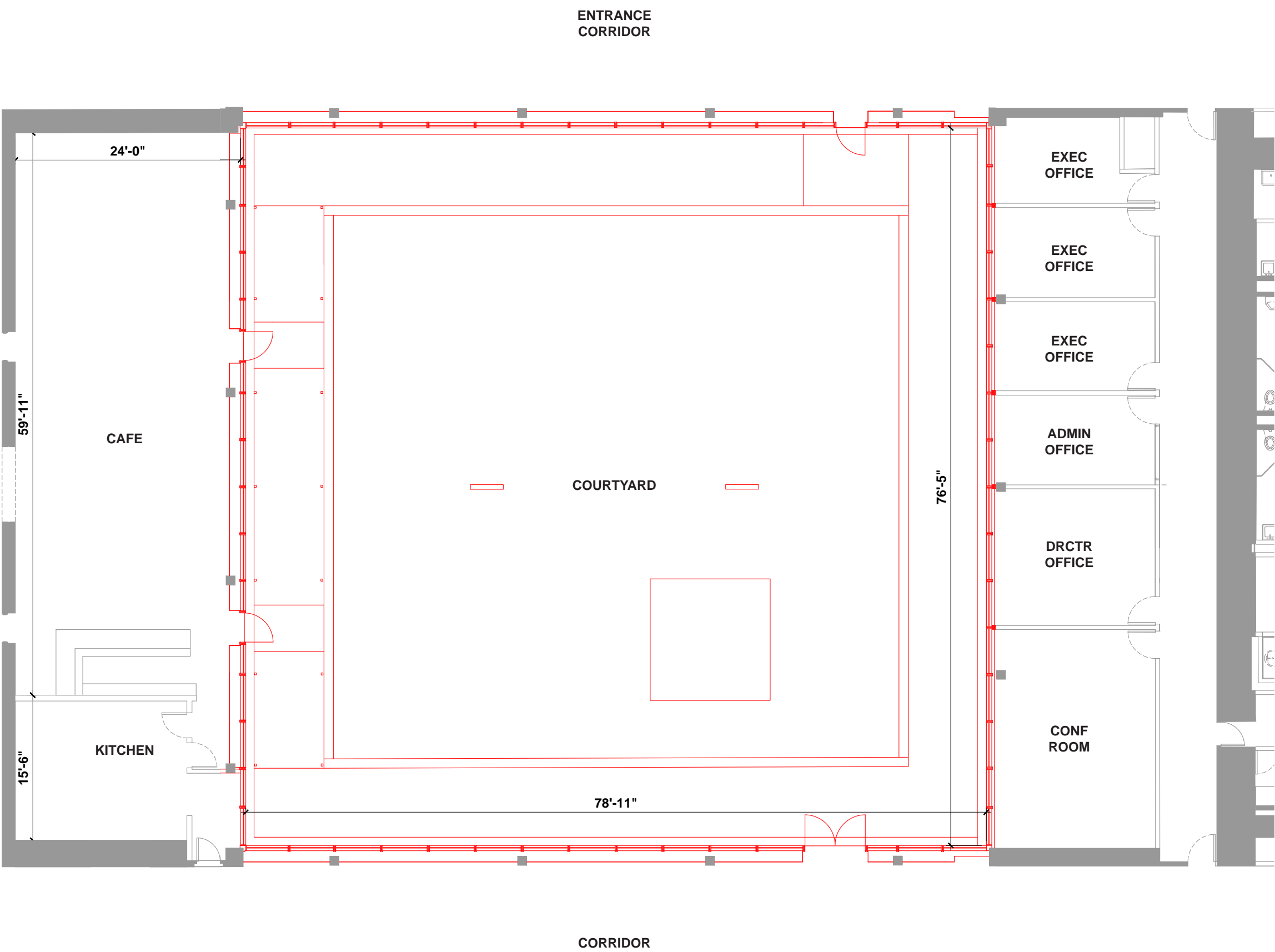
1962 Existing Courtyard Plan

Plan showing existing conditions a was modified in the late 1990’s.



1962 BUILDING COURTYARD

**1962 Courtyard Removal Plan**  
Plan showing proposed removal of existing courtyard facade, glazing, and trellis.



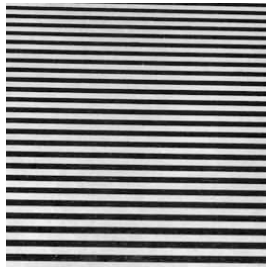
# 1962 COURTYARD CURTAINWALL ALTERATION

## 1962 Courtyard Alteration

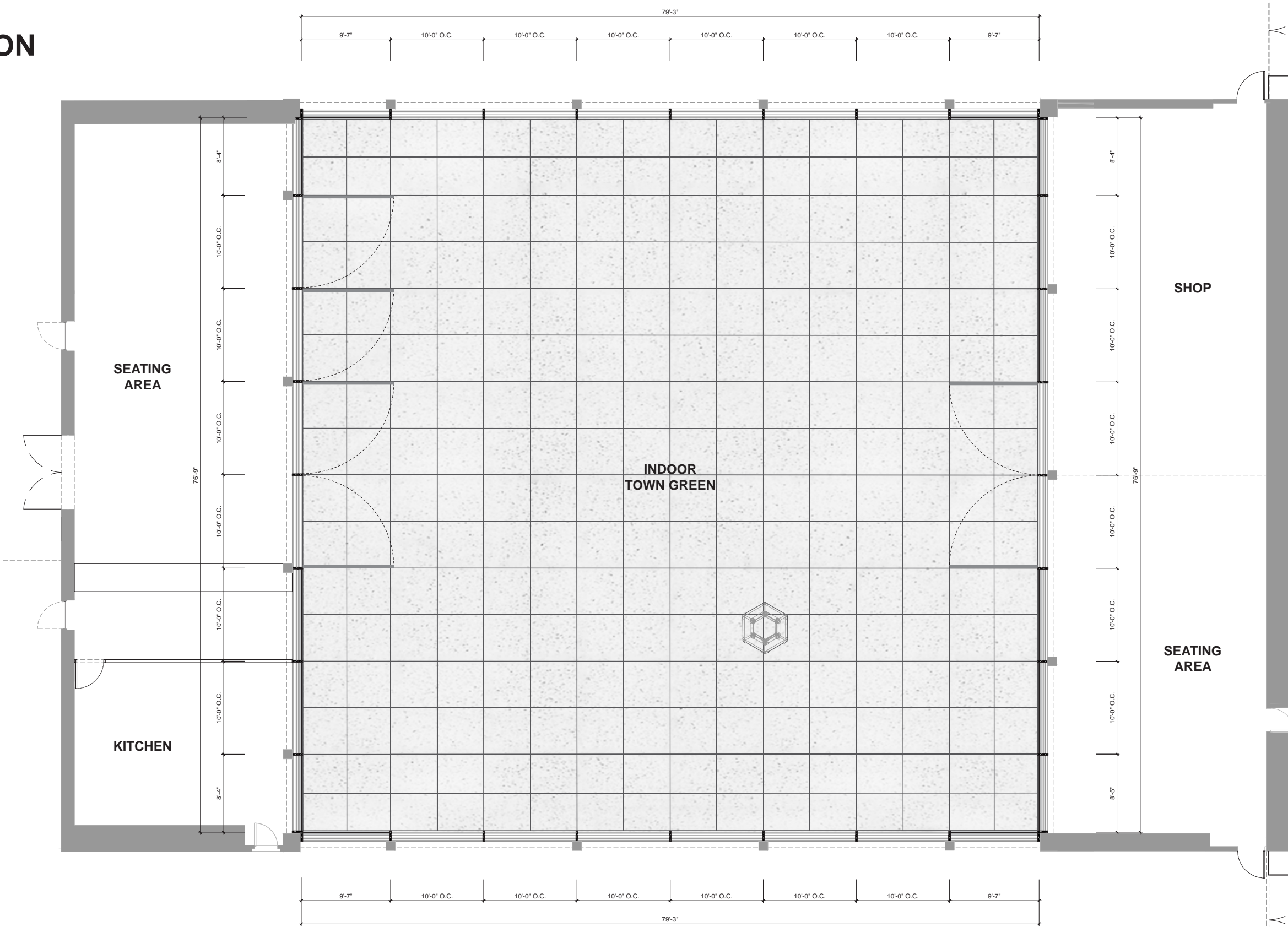
The covered courtyard will serve as the nucleus of the free public entry of the 1962 building. The covered courtyard by Studios Other Spaces, [SOS] will be provided with a storefront enclosure on the east and west axis that will allow for a degree of permeability to and from Delaware Park, the adjacent corridors and Elmwood Avenue. The covered courtyard is being conceived as a multi-functional event space that can seat 300 and is served by a catering kitchen. As the south side storefront panels will be operable, the courtyard can accommodate spill-out tables from the AK café to animate the space. The space will be programmed to accommodate a diversity of performances which might include: lectures / readings, music and dance, visual art residency, etc. As a large open space, the courtyard will be ideal for the display of large scale sculptures.



White Venetian Terrazzo



Stainless Steel Floor Grille





1962 COURTYARD  
ALTERATION

1962 Courtyard Alteration

The interiorization of the Sculpture Garden allows the re-thinking of the Courtyard curtainwall.

The existing exterior courtyard enclosure is being removed and replaced with a new interior storefront in keeping with the original SOM design. The two key items in this refurbishment are the return to the 10 foot module about the columns as well as the replacement of the grey tinted glass with clear glass. The original finishes will be respected and replicated. The fascia at the roof interface will be preserved. As much of the glazing will be retained as possible especially at the four corners.

The red courtyard floor tiles are not original and are being replaced with Venetian terrazzo composed of white marble chips set in a white cement matrix to recall the original white gravel. This floor system is being laid out in a 5 foot module about the mullions and columns with zinc divider strips.

EXISTING



1. 1962 Original Courtyard



2. 1962 Current Courtyard

PROPOSED



3. Proposed, Closed

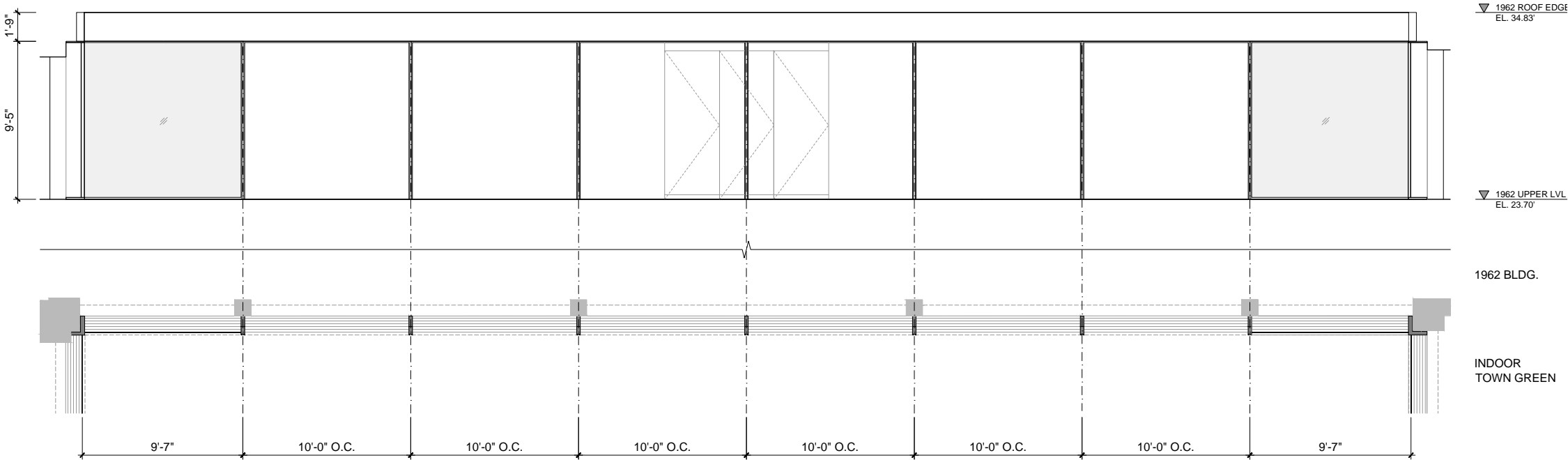


4. Proposed, Open (New Ramp Visible Beyond)

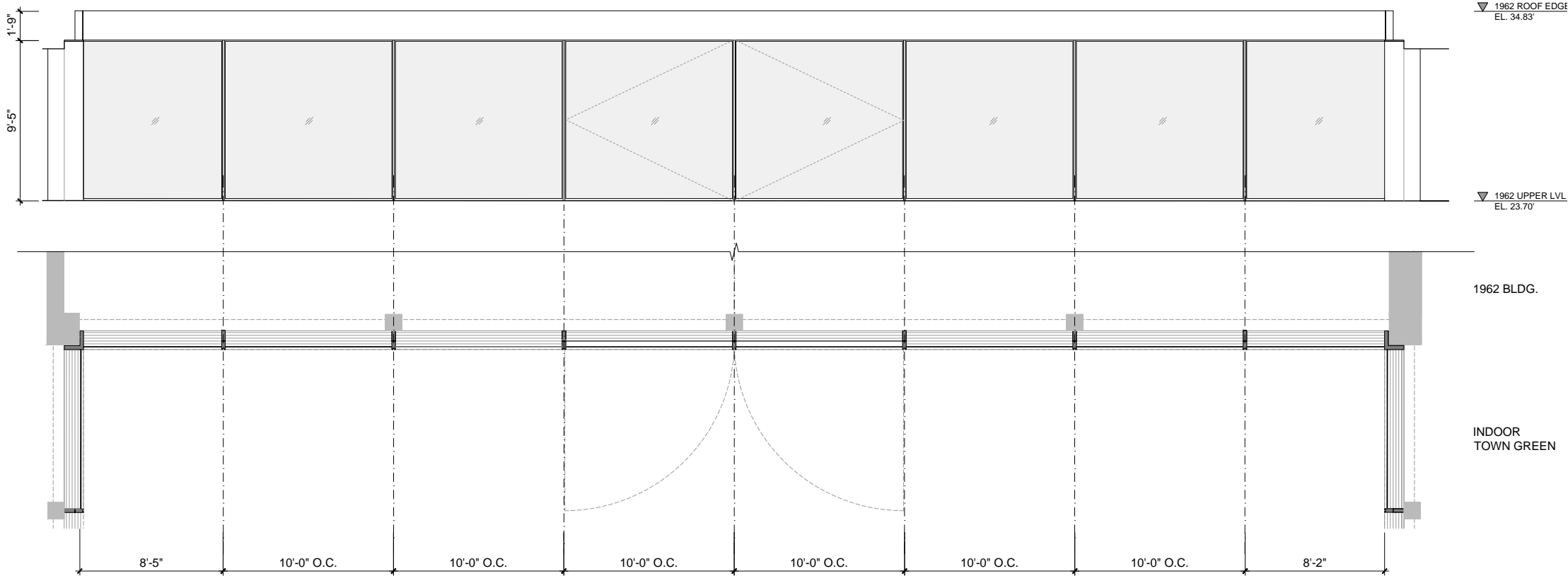
# 1962 COURTYARD CURTAINWALL ALTERATION

## 1962 Building Proposed Elevation

The north and south elevations will feature full 10 foot wide operable panels to allow for free and easy access [porosity] to the restaurant seating area, and shop with its’ adjacent seating area. The operable sections shall be identical in section when closed as the fixed components. The east and west elevations will not be glazed except at the ten foot corner modules. This is being proposed so as to open the courtyard up to the adjacent corridors as well as to emphasize the east / west access through the site from Delaware park to Elmwood Avenue via the new east vestibule. The courtyard storefront system will be designed such that adjacent sill sections can be added in the future for reversibility.



02 EAST WALL PLAN & ELEVATION

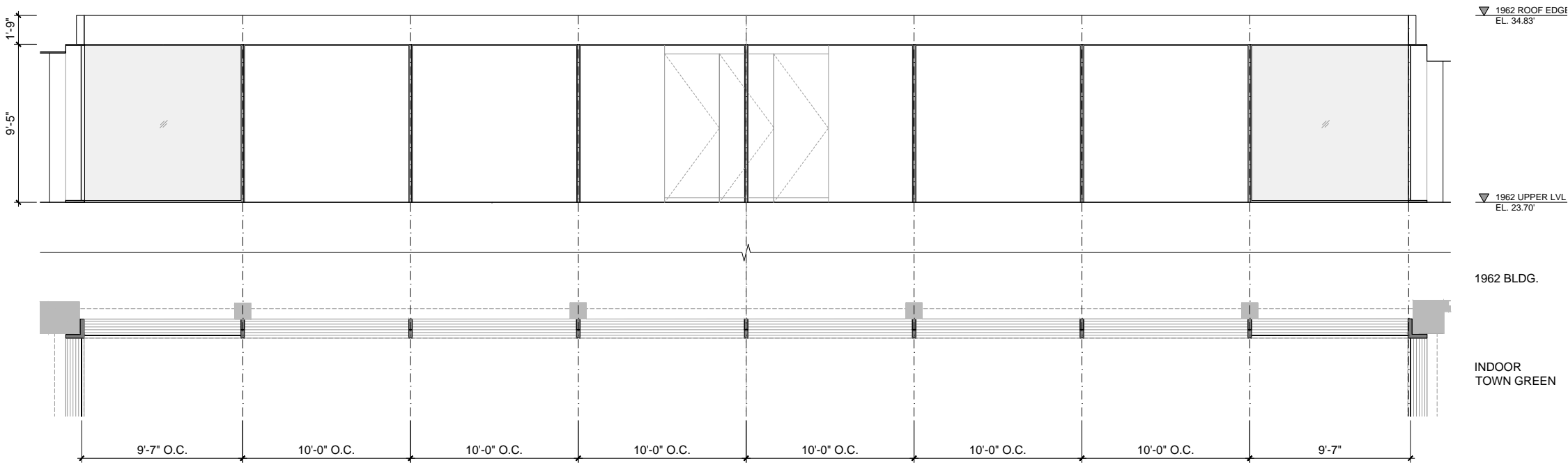


01 NORTH WALL PLAN & ELEVATION

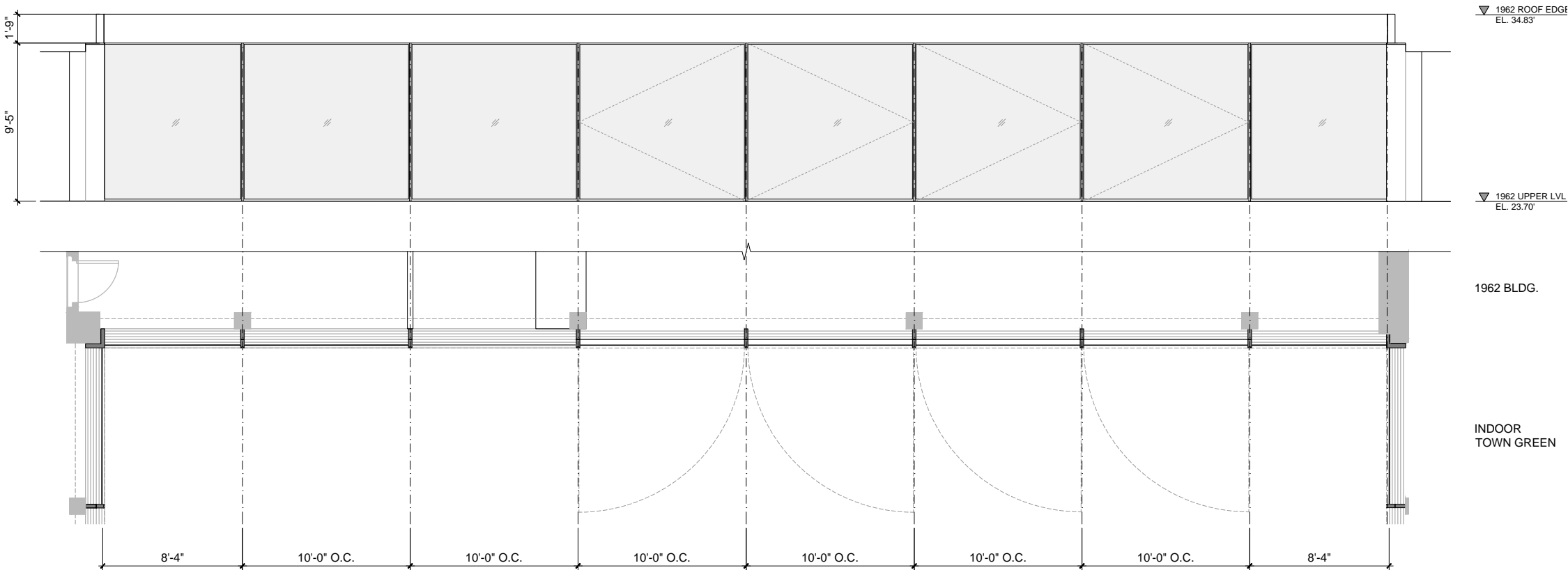
# 1962 COURTYARD CURTAINWALL ALTERATION

## 1962 Building Proposed Elevation

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04 WEST WALL PLAN & ELEVATION

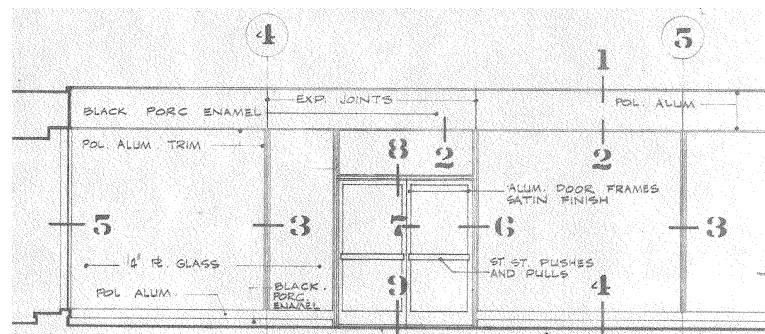


03 SOUTH WALL PLAN & ELEVATION



# 1962 COURTYARD CURTAINWALL ALTERATION

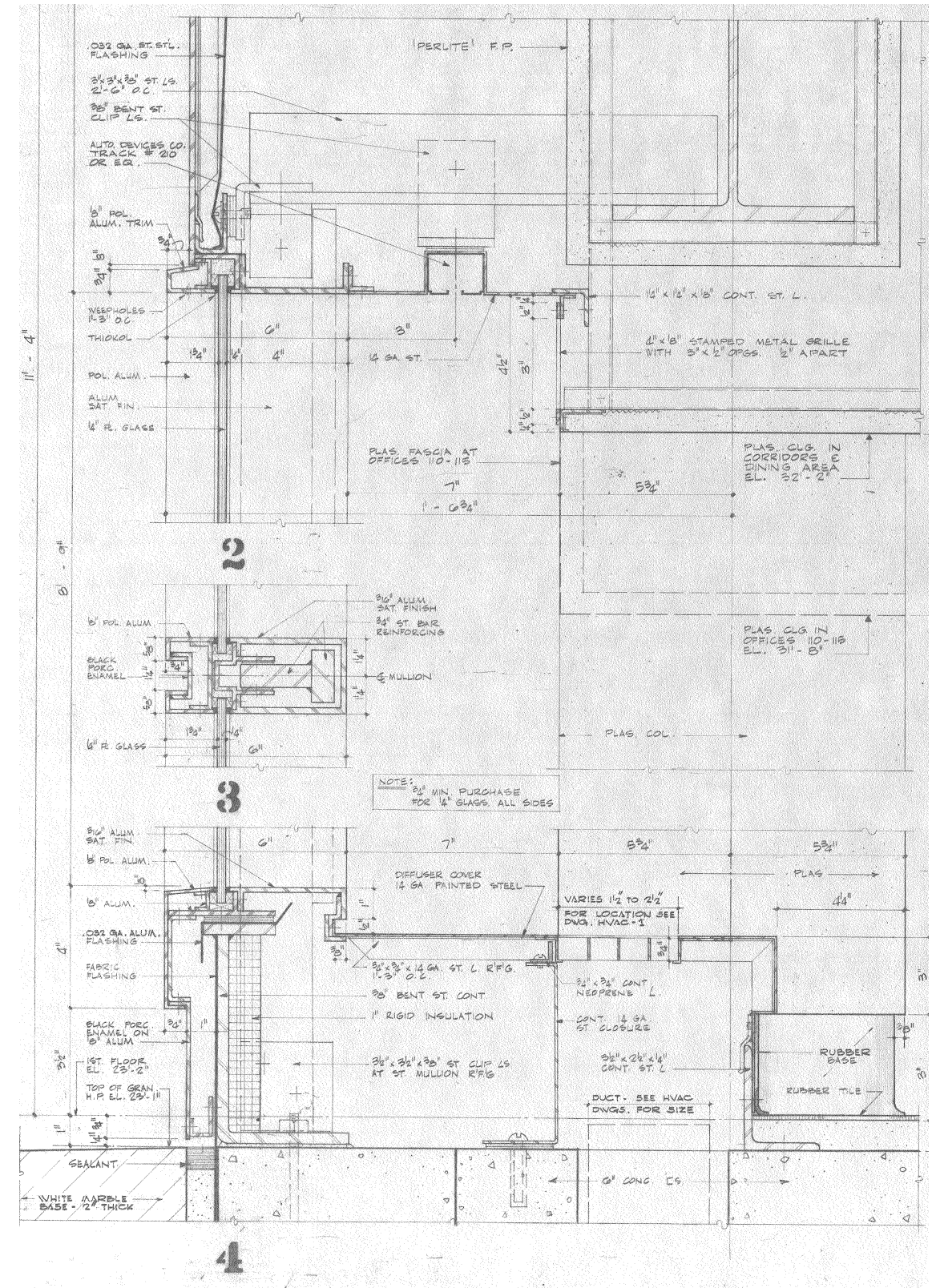
## 1962 Building Existing Historic Details



### 1. Part East Elev. of Court - Typical Details



## 2. Original SOM Curtainwall

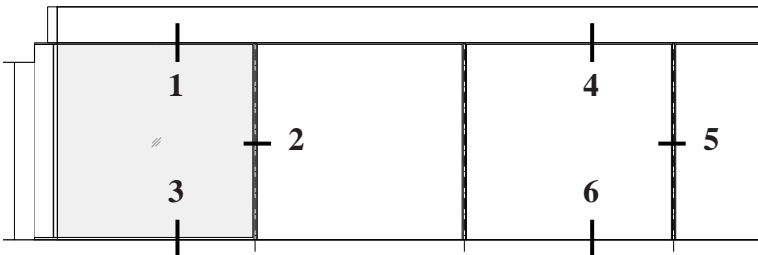


### 3. Original SOM Curtainwall Detail Section

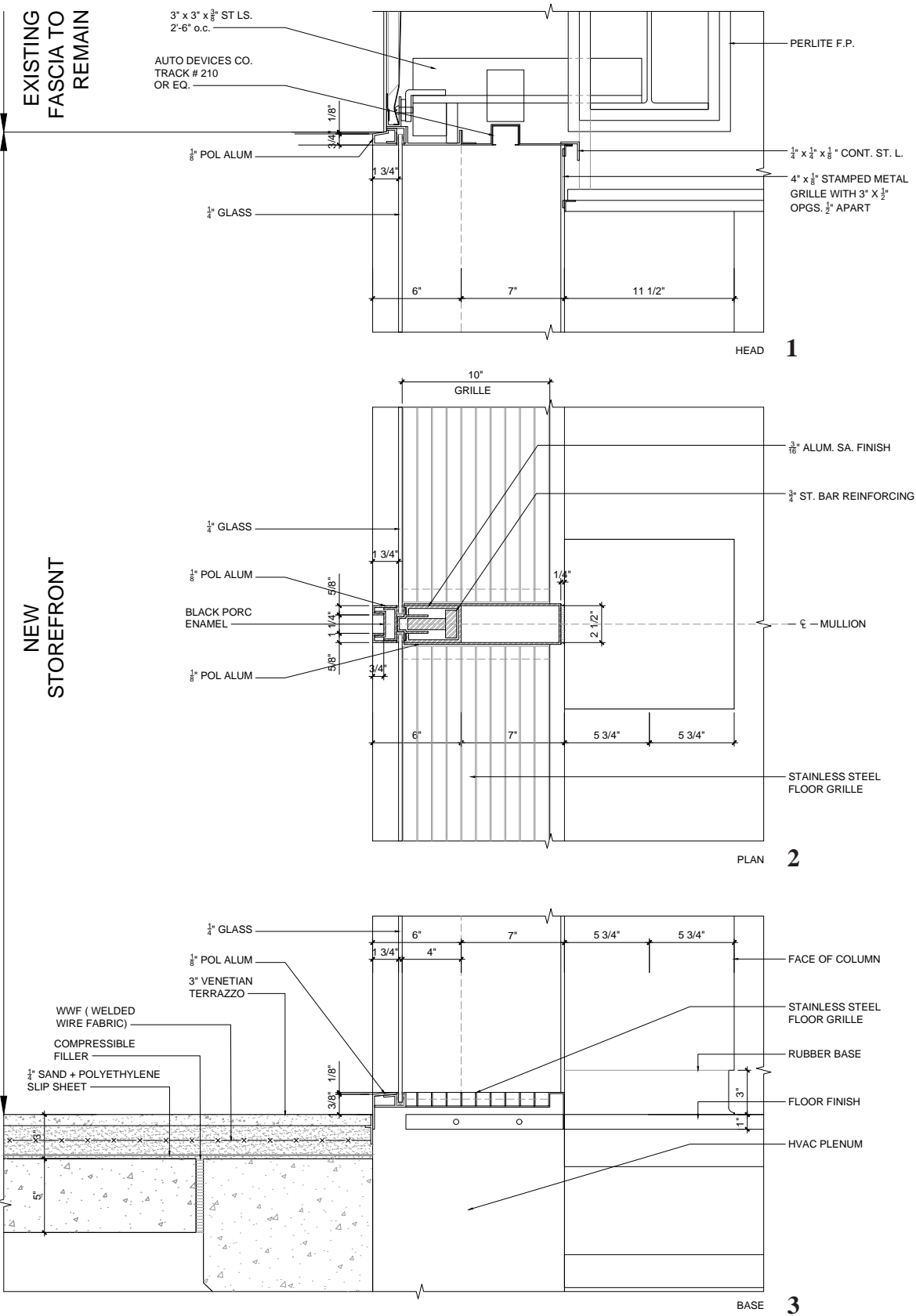


1962 COURTYARD  
CURTAINWALL ALTERATION

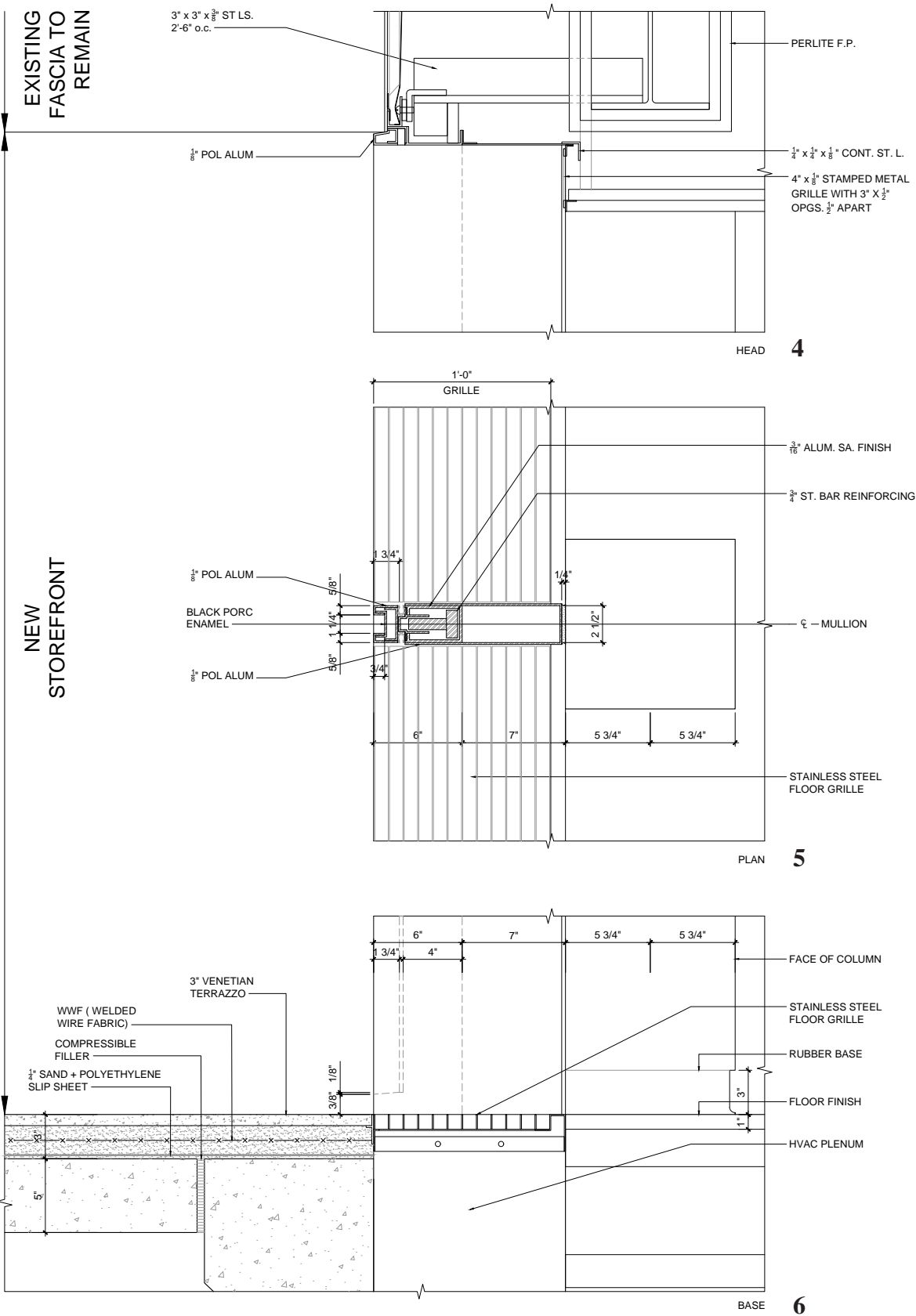
1962 Building Proposed Curtainwall  
Details



1. Part East Elev. of Court - Typical Details



2. Detail Section at Glazed Condition



3. Detail Section at Porous Condition

# NORTH BUILDING MASSING AND SIZE

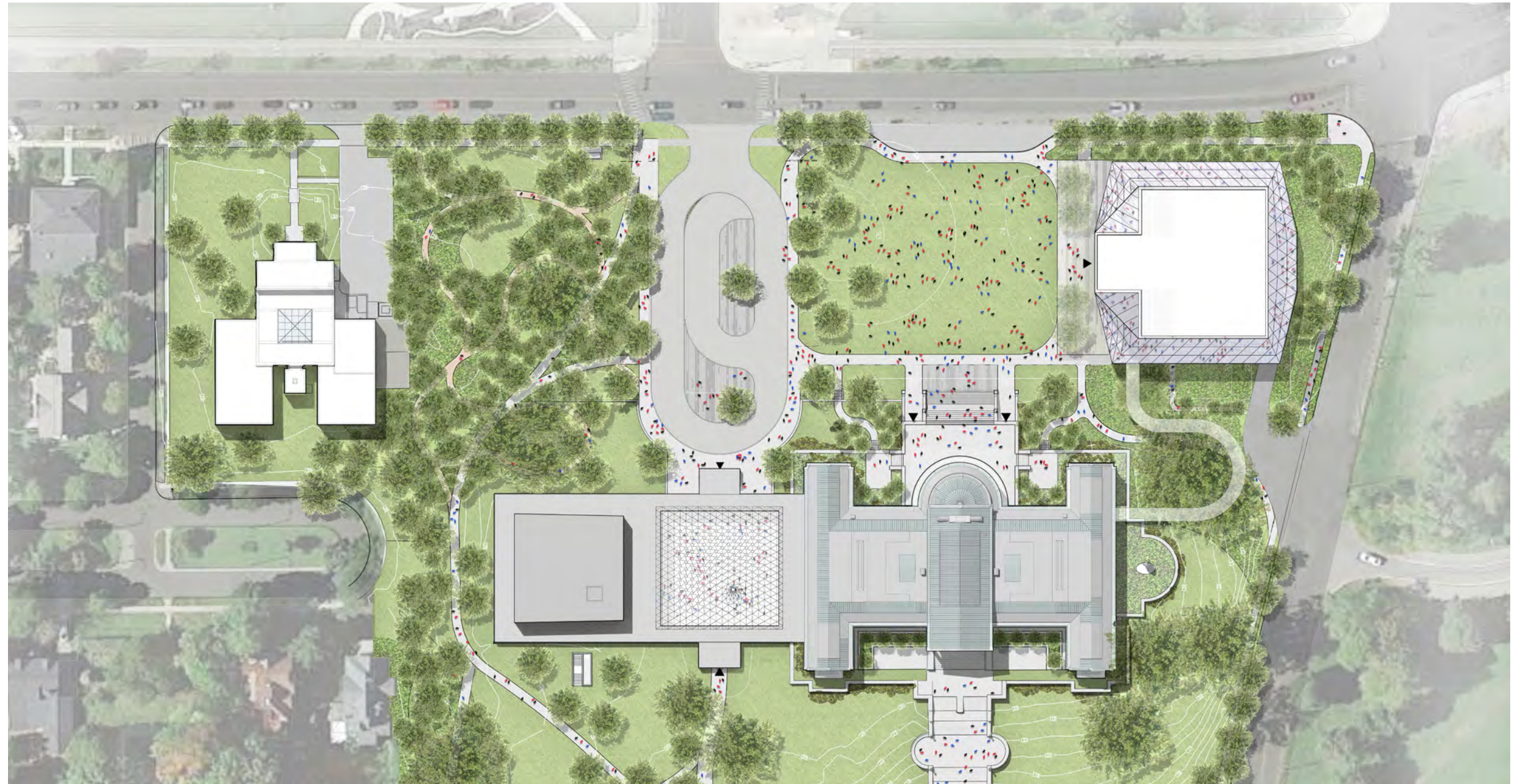


## NORTH BUILDING MASSING

The Albright-Knox Art Museum is refurbishing and renovating the existing buildings and expanding with the construction of a New Building on its campus based on fundamental institutional needs. These are spatial, programmatic, operational, and facility needs based on the urgent requirement for more space, the museum's aging facilities, and a growing incompatibility between these facilities and the contemporary national standards and best practices that are a criterion for the accreditation of American museums. The New Building will fulfill these needs in part by providing additional new flexible exhibition space with state-of-the-art lighting, security and movable gallery walls, consolidated executive offices, a new art loading dock and entry hall.

OMA's aspiration for the North Building is to make the footprint as compact as possible and limit the height as much as possible in respect to the neighboring historical buildings, while maintaining the AK's needs for maximum clear heights of the galleries.

The North Building is placed right up to the property line on the corner of Elmwood Avenue and Iroquois Drive to allow for the greatest amount of buffer space from the historic buildings.

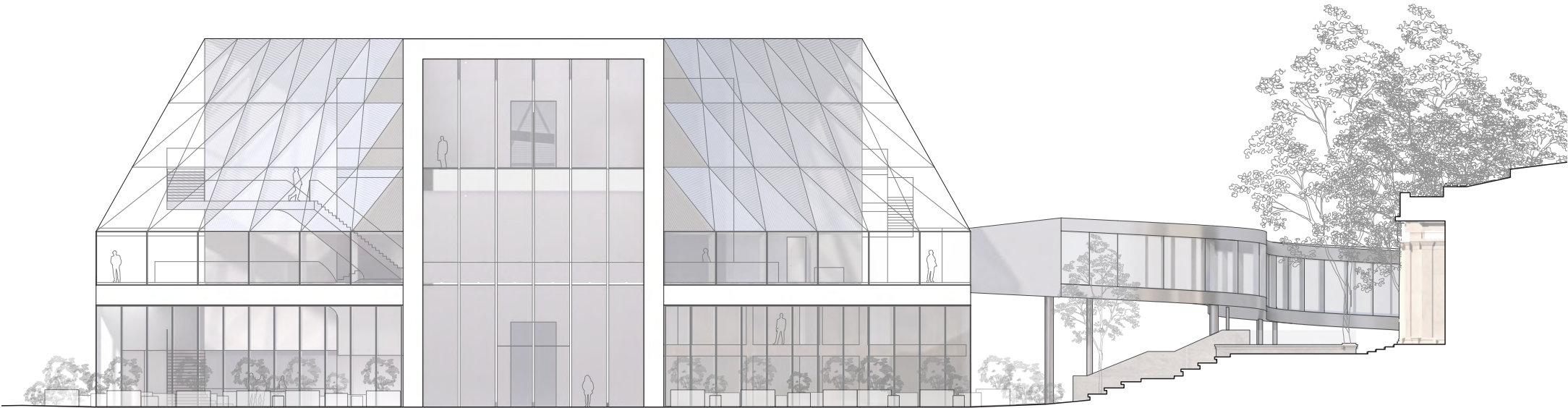


Proposed Campus Site Plan

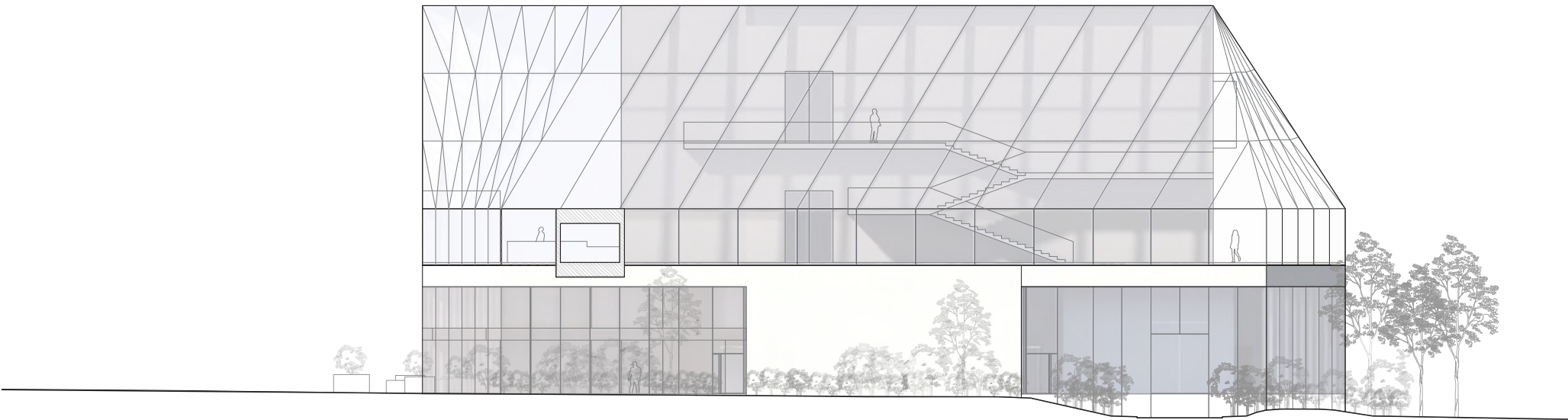


# NORTH BUILDING ELEVATIONS

While the existing buildings are opaque in material, the New Building is lighter with a more transparent façade that displays the activity and artwork within the museum, reflecting the constantly-changing character of the building.



1. North Building - South Elevation

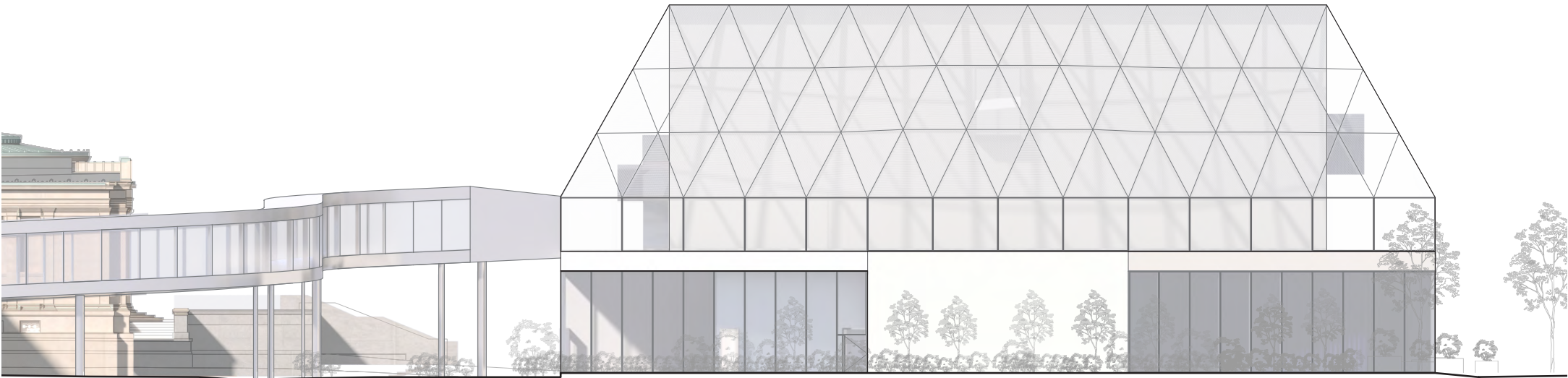


2. North Building - East Elevation

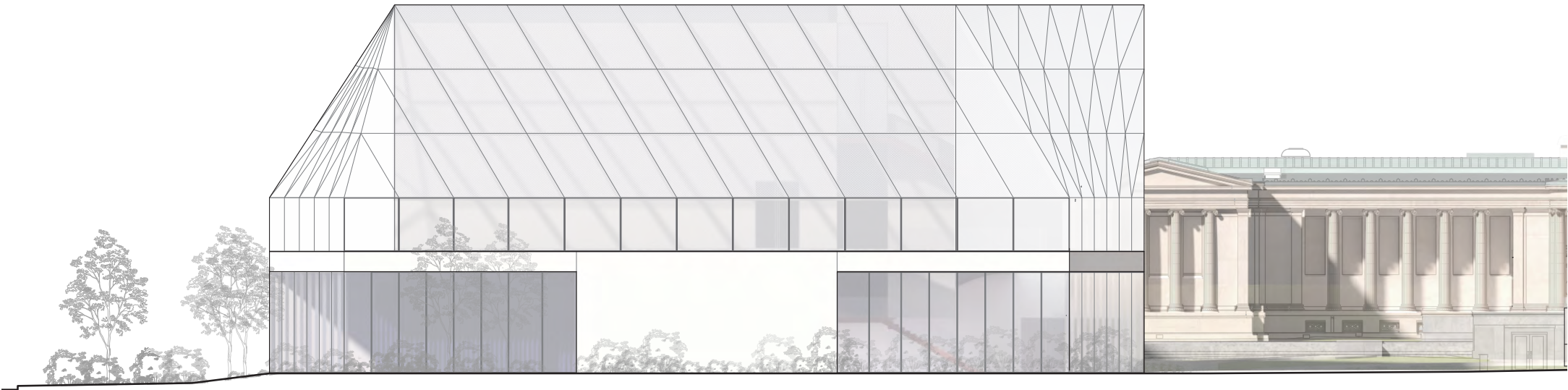
# NORTH BUILDING ELEVATIONS

Similar to the Neoclassical building, the elevation for the North Building is separated in a tripartite division with the gallery volumes at the base, the sculpture terrace at mid-point, and a light veil on top, giving the overall composition a more human scale that references classical divisions in architecture history.

The mullion spacing and the architectural details of the North Building recall the colonnade and the compositional rhythm of the 1905 and 1962 Buildings.



1. North Building - North Elevation



2. North Building - West Elevation



NORTH BUILDING MASSING



Proposed Campus from Parking Ramp



NORTH BUILDING MASSING



Proposed North Building from the Restored 1905 Stair



NORTH BUILDING MASSING



Proposed North Building from Elmwood Avenue



NORTH BUILDING MASSING



Proposed North Building from Iroquois Drive



VISUAL IMPACT ANALYSIS

View 1  
View from the south  
on Elmwood Avenue





VISUAL IMPACT ANALYSIS

View 2  
  
View from the west  
from Buffalo State University  
(Rockwell Hall)





VISUAL IMPACT ANALYSIS

View 3

View from the west  
on Elmwood Avenue  
looking at 1905 facade





VISUAL IMPACT ANALYSIS

**View 4**  
  
View from the intersection  
of Nottingham Terrace  
and Elmwood Avenue





VISUAL IMPACT ANALYSIS

View 5

View from the parking lot entrance  
to the Buffalo History Museum





VISUAL IMPACT ANALYSIS

View 6  
View from the facade  
of the Buffalo History Museum





VISUAL IMPACT ANALYSIS

View 7

View from the rear portico  
of the Buffalo History Museum





VISUAL IMPACT ANALYSIS

View 8  
View from the Lincoln Parkway  
bridge over Scajaquada Expressway





VISUAL IMPACT ANALYSIS

View 9  
  
View from the east  
on Lincoln Parkway  
near base of 1905 staircase





VISUAL IMPACT ANALYSIS

**View 10**  
  
View from bottom level  
of the Marcy Casino  
(looking from the east)





VISUAL IMPACT ANALYSIS

View 11  
View from across Mirror Lake





VISUAL IMPACT ANALYSIS

**View 12**  
  
View from Lincoln Parkway  
from the south near the main  
entrance to the Marcy Casino  
and the Delaware Rose Garden





VISUAL IMPACT ANALYSIS

View 13

View from the north of Hoyt Lake  
looking southeast





VISUAL IMPACT ANALYSIS

**View 14**  
  
View from north of Scajaquada  
Expressway / Mirror Lake





VISUAL IMPACT ANALYSIS

View 15

View from intersection  
of Lincoln Parkway  
and Iroquois Drive looking west



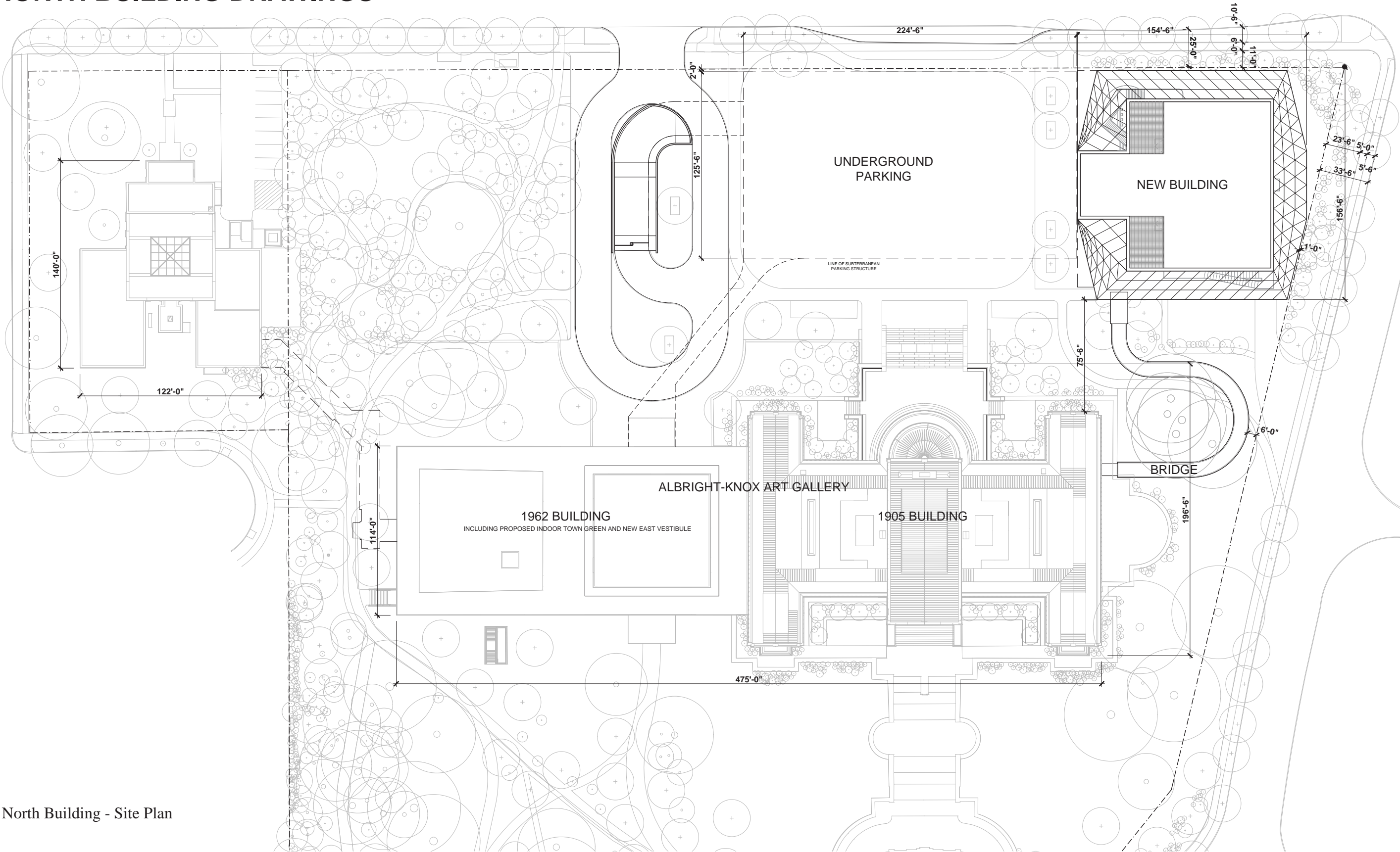


VISUAL IMPACT ANALYSIS

**View 16**  
  
View from north  
on Scajaquada Expressway  
after crossing Lincoln Parkway



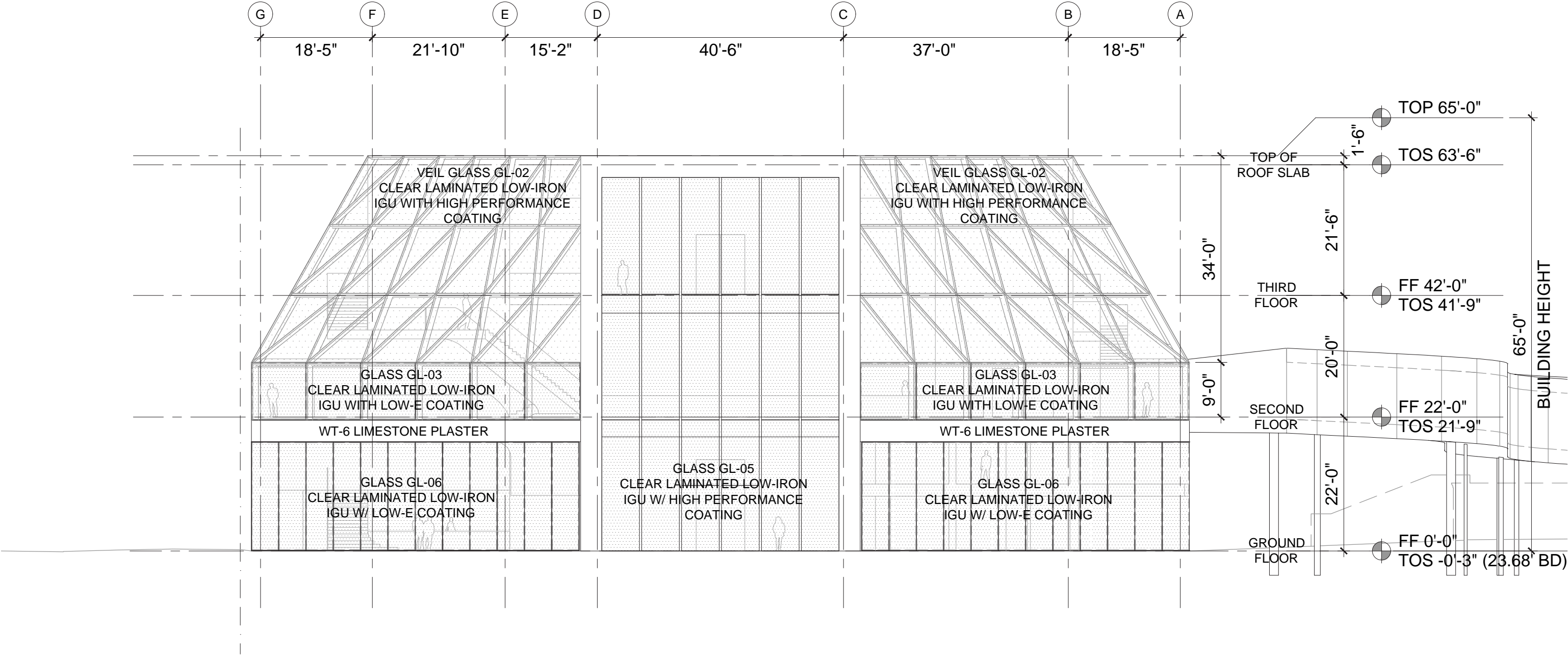
NORTH BUILDING DRAWINGS



North Building - Site Plan

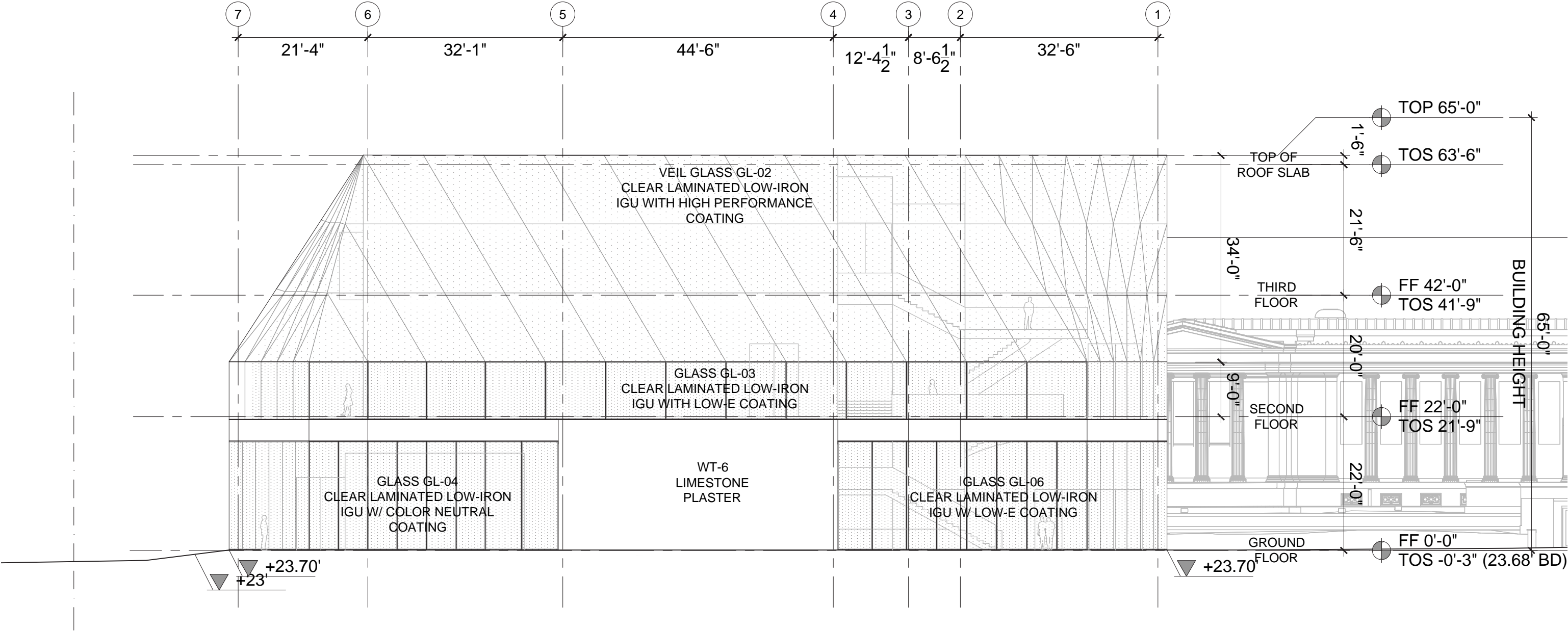


NORTH BUILDING DRAWINGS



North Building - South Elevation

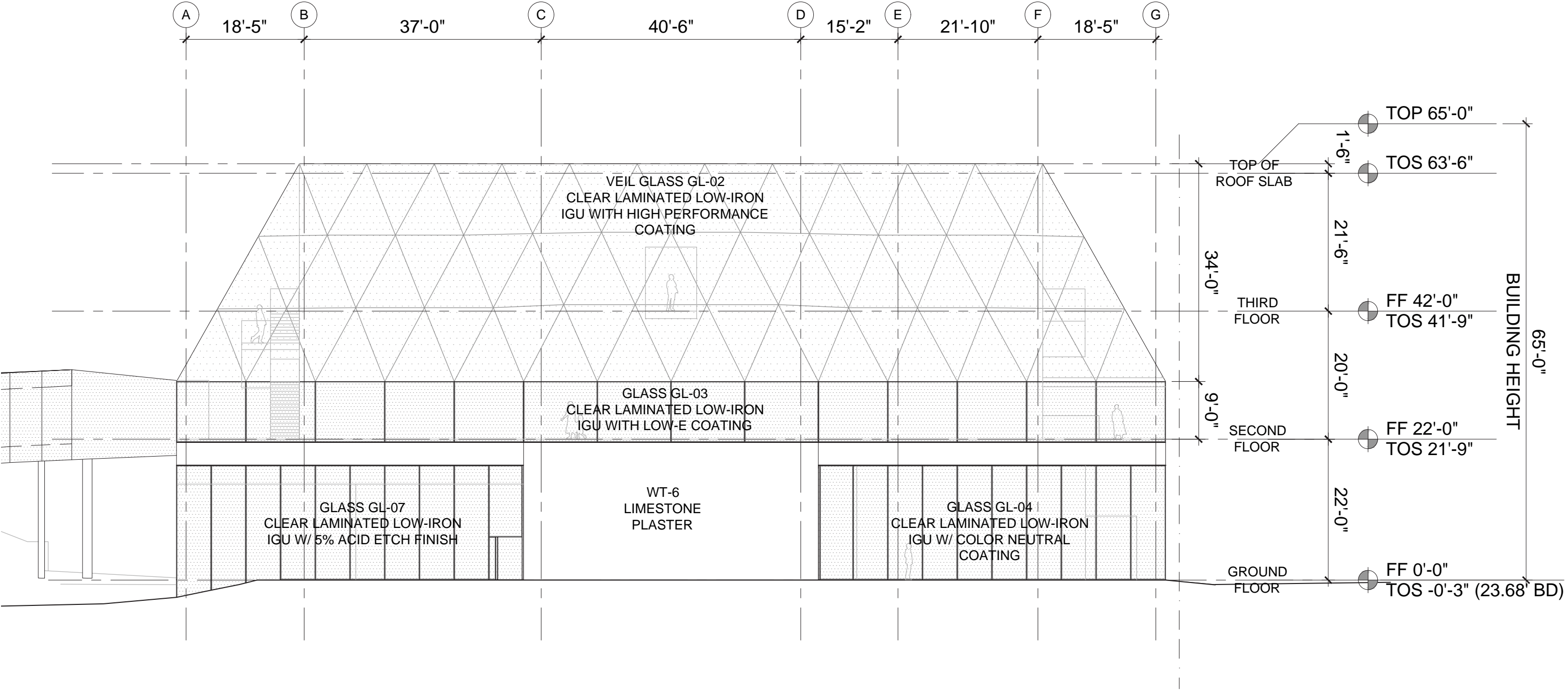
NORTH BUILDING DRAWINGS



North Building - West Elevation

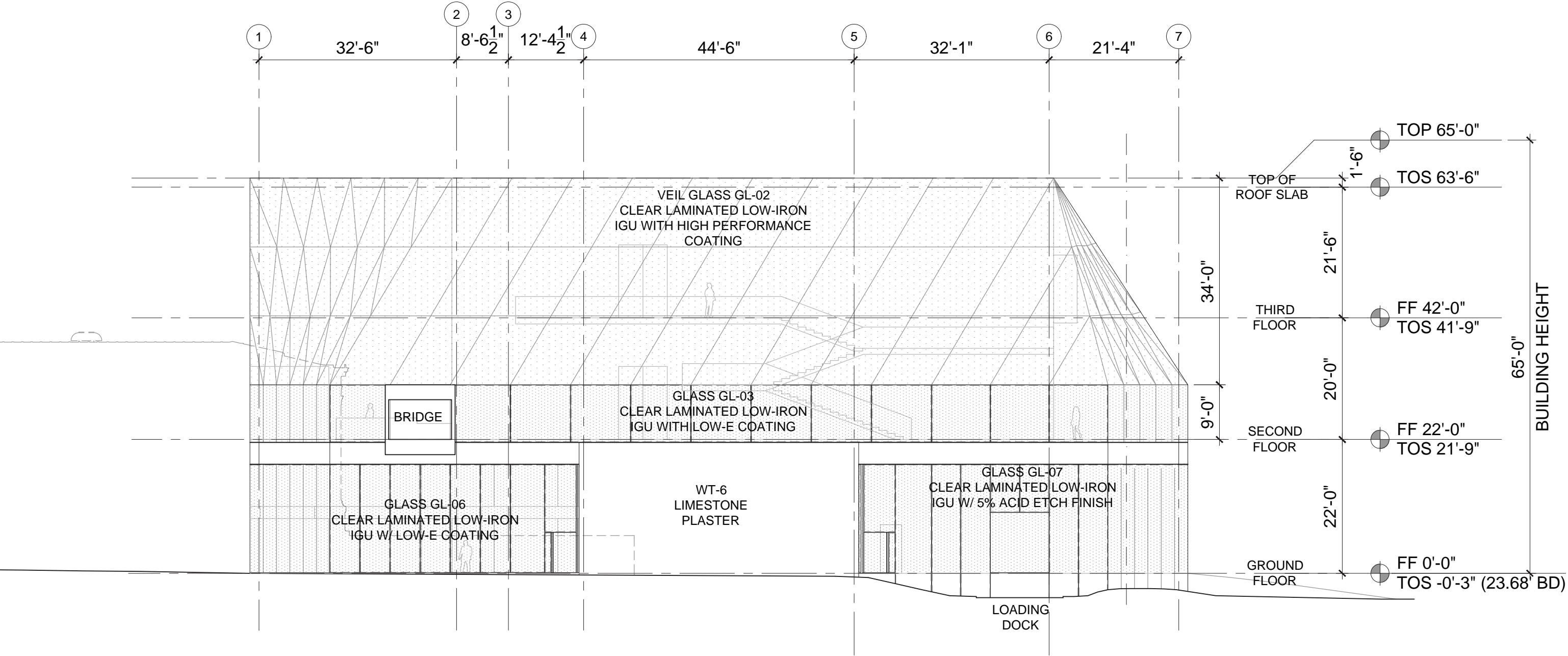


NORTH BUILDING DRAWINGS



North Building - North Elevation

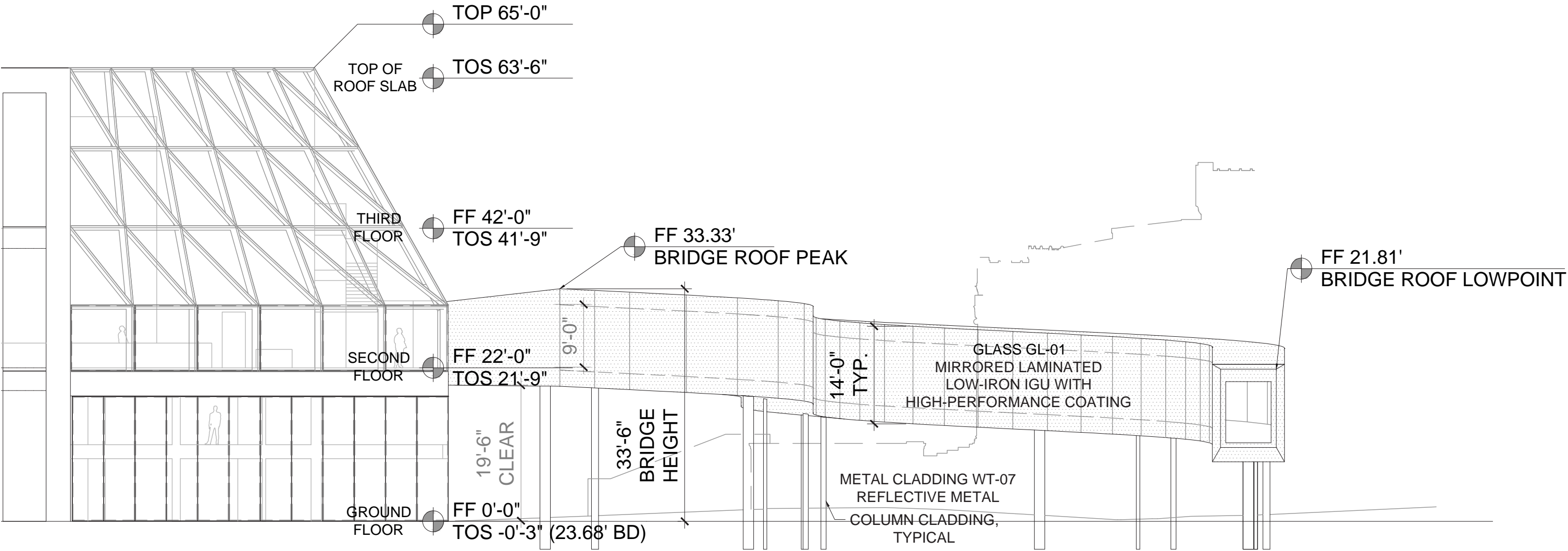
NORTH BUILDING DRAWINGS



North Building - East Elevation



NORTH BUILDING DRAWINGS



South Bridge Elevation

**Albright Knox Gallery**  
Buffalo Planning Board  
Submission

April, 2019

***Common sky [WT]***

**Studio  
Other  
Spaces**

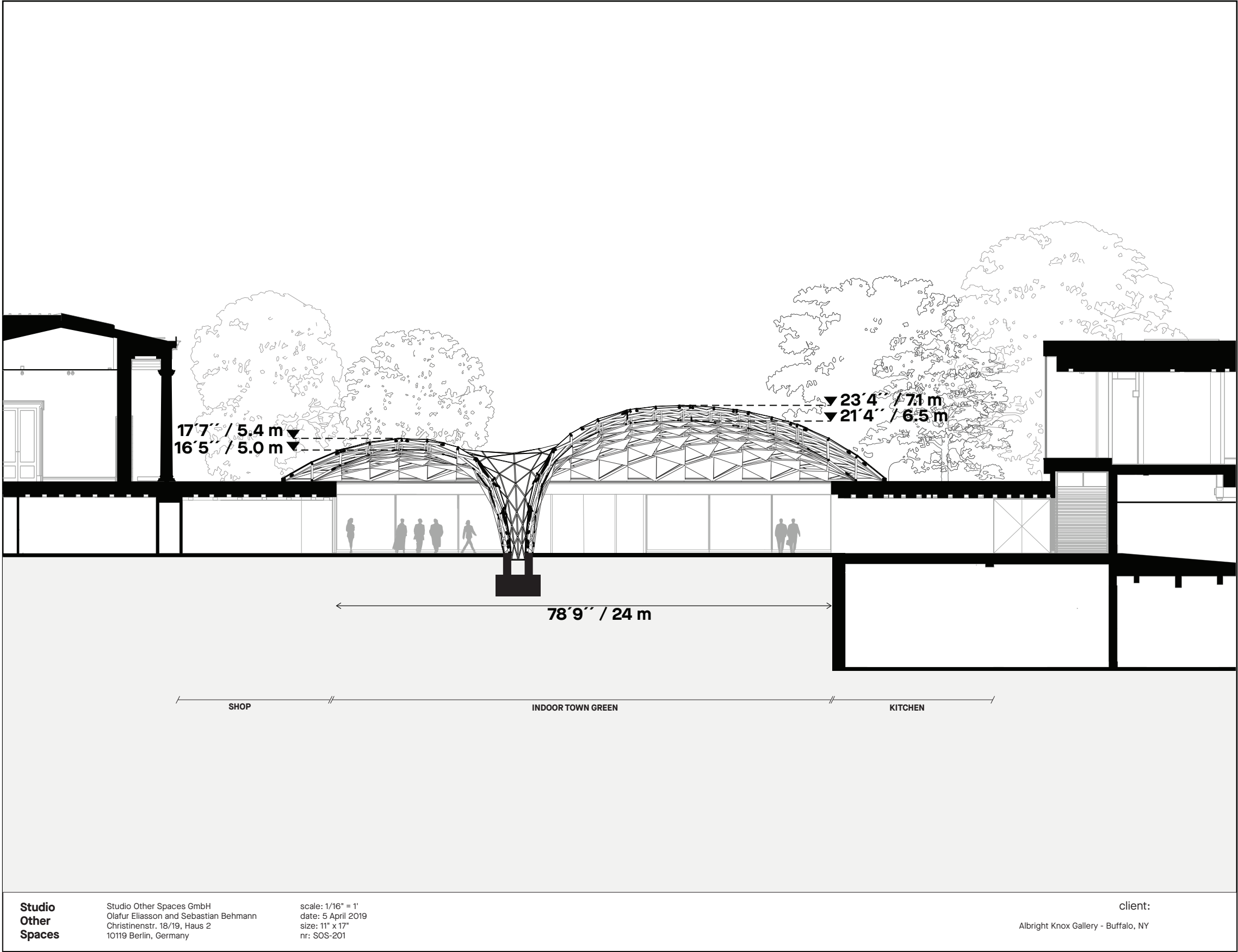


PROPOSAL  
SECTION

Section N-S

(DESCRIPTION)  
Section showing the spatial relationship between the 1904 building, the 1962 addition and the proposed renovation of the courtyard.

(NARRATIVE)  
Since new functions will surround the plaza, the artwork *Common sky* is conceived as an envelop to further dialogue and exchange.

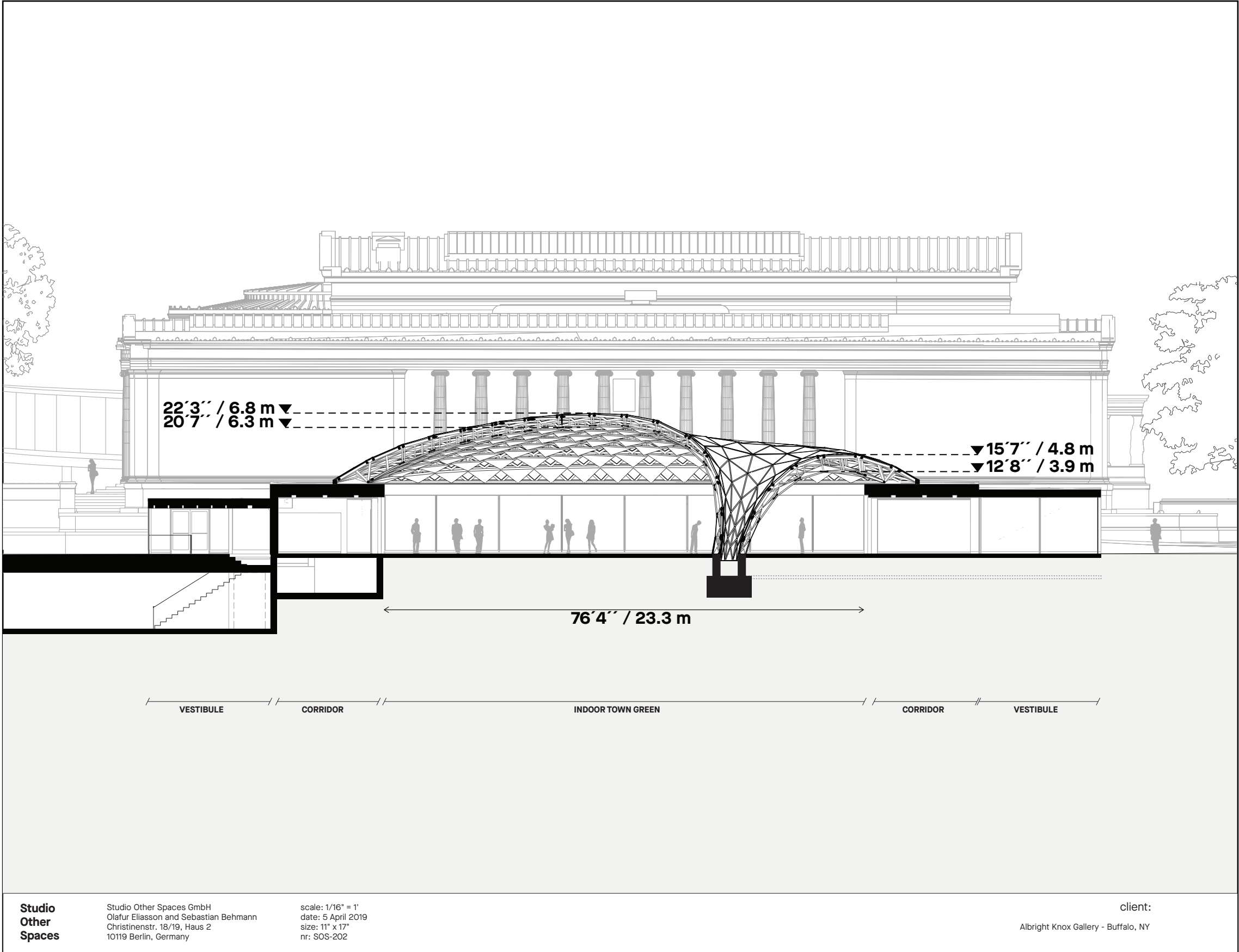


PROPOSAL  
SECTION

Section E-W

(DESCRIPTION)  
Section showing the proposed spatial continuity between the entrance towards the city, the new inner plaza and the park.

(NARRATIVE)  
The roof's varying heights define a generous livability of the space while producing different degrees of intimacy.



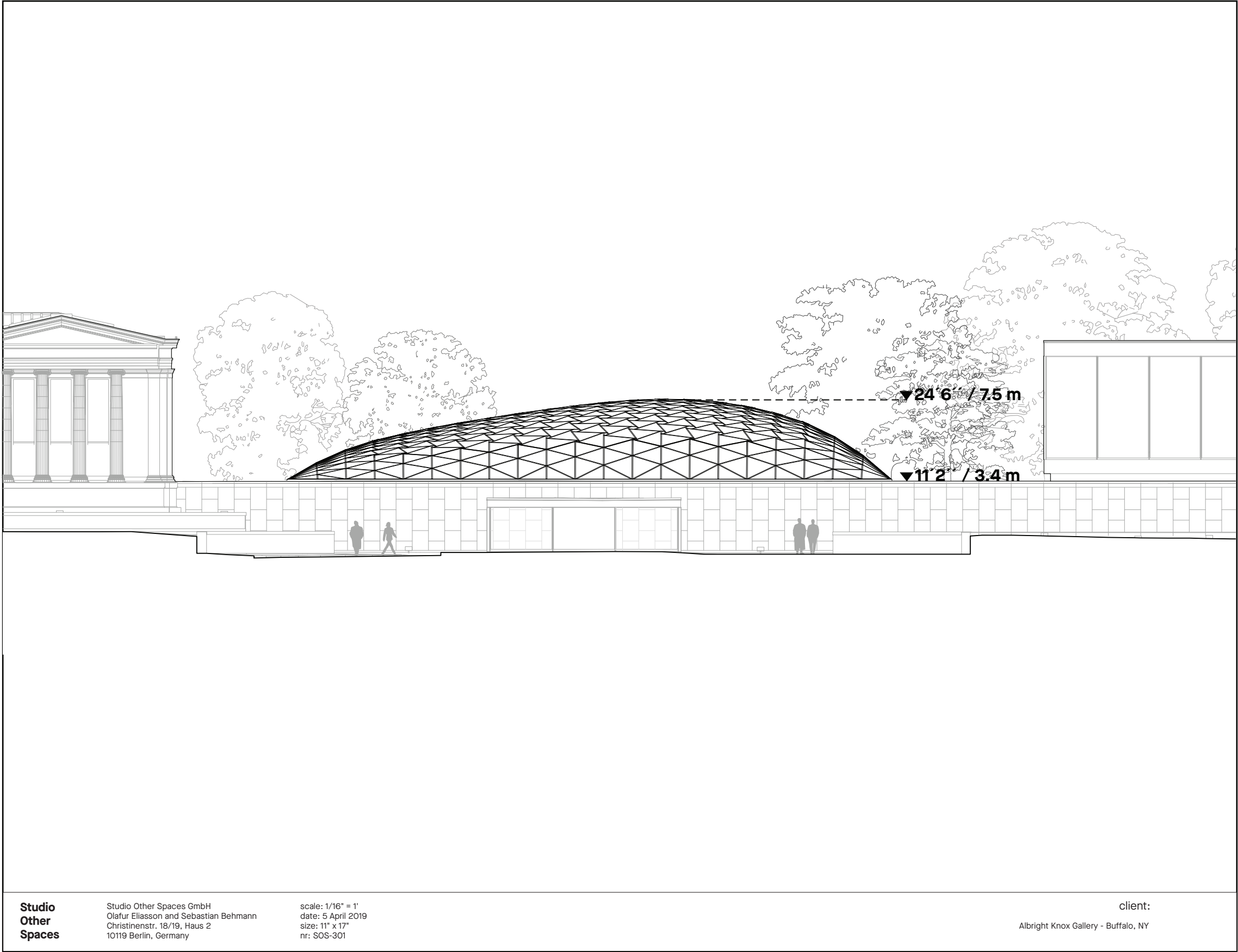


PROPOSAL  
ELEVATION

Elevation West

(DESCRIPTION)  
Elevation drawing of the western  
façade of the building.

(NARRATIVE)  
Gentle curves, evocative of snow drift  
or natural weather phenomena, define  
the shape of the artwork without  
conflicting with the building's existing  
languages.

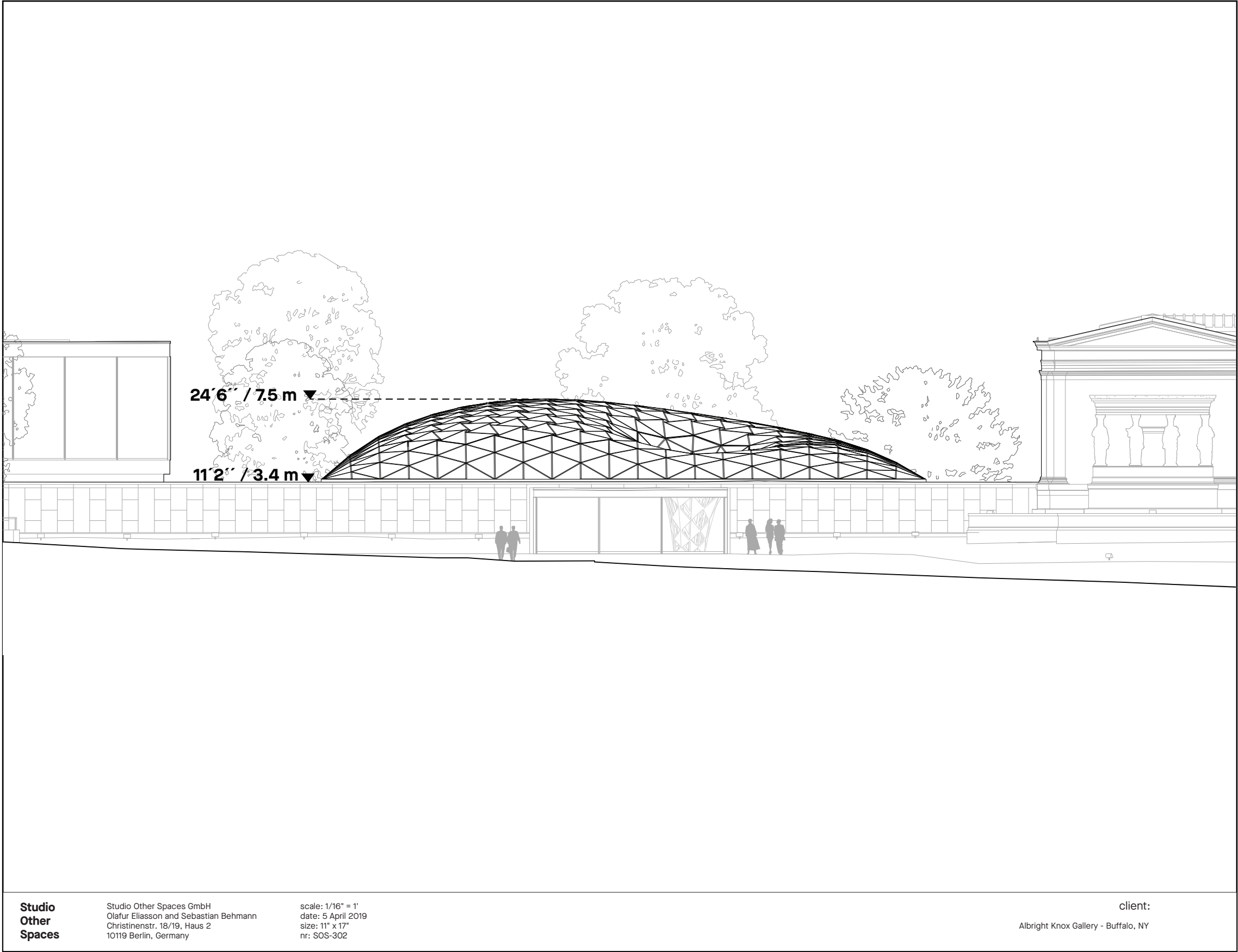


PROPOSAL  
ELEVATION

Elevation East

(DESCRIPTION)  
Elevation drawing of the eastern façade  
of the building.

(NARRATIVE)  
Gentle curves, evocative of snow drift  
or natural weather phenomena, define  
the shape of the artwork without  
conflicting with the building’s existing  
languages.





**PROPOSAL  
OUTER VIEW**

**Perspective from West**

(DESCRIPTION)  
Rendererd collage showing the western entrance to the new square, from Elmwood Ave.

(NARRATIVE)  
The artwork’s contemporary silhouette will renovate the urban side of the Gallery, encouraging the entry to the new square.





**PROPOSAL  
OUTER VIEW**

**Perspective from East**

(DESCRIPTION)  
Rendererd collage showing the eastern entrance to the new square, from Delaware Park.

(NARRATIVE)  
The relatively low, transparent roof will be barely visible from the park, reflecting and blending in the colors of the nature.



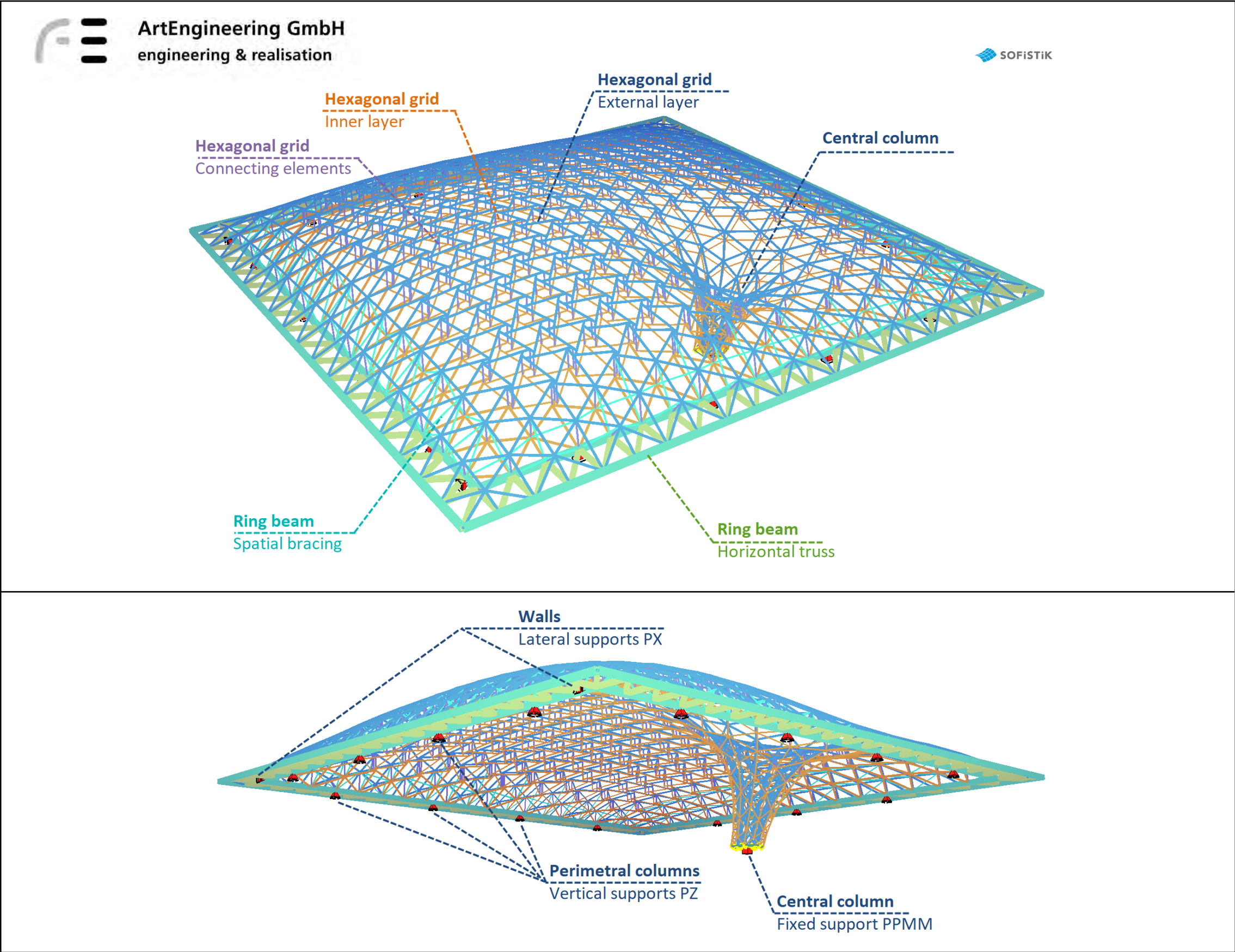


ENGINEERING  
CONCEPT PHASE STRATEGY

System overview

(DESCRIPTION)  
Three-dimensional visualization of the roof structural system highlighting its main components and its connections to the supports.

(NARRATIVE)  
Common sky is composed by a double layered grid structure which, raising from the ground, organically embraces the whole space.



ENGINEERING  
CONCEPT PHASE STRATEGY

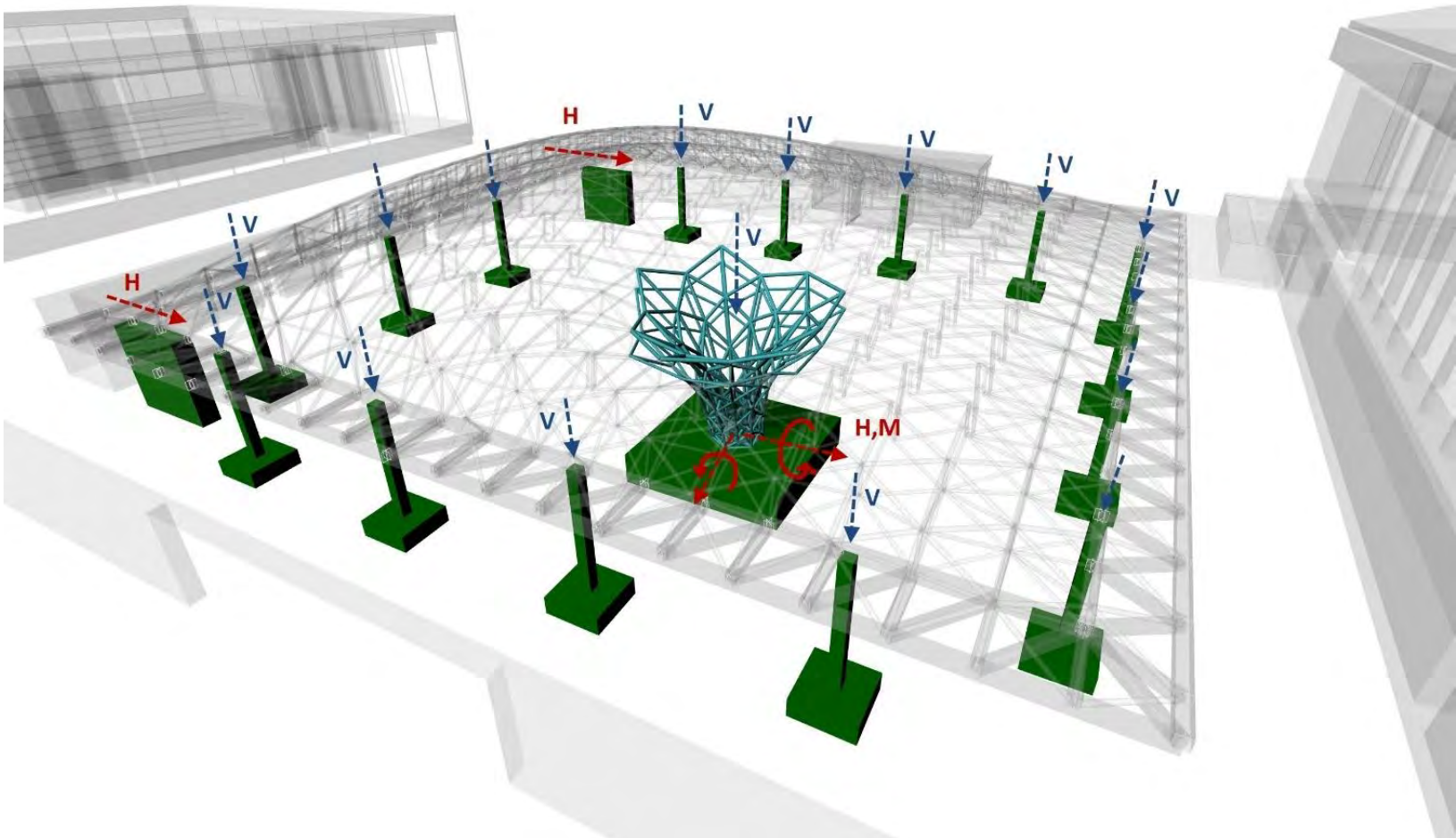
Supports scheme

(DESCRIPTION)  
Three-dimensional schematic  
description of the different supports  
involved.

(NARRATIVE)  
The selection of the supports  
allows the new roof to act almost  
independently from the existing  
structure.



The selection of the supports allows the new roof to act almost independently from the existing structure.





PROPOSAL  
STUDY MODELS

Photos

(DESCRIPTION)  
Series of pictures of a mock-up of the structure, showing how the roof is perceived at different angles with varying backgrounds.  
Description of the main materials involved.

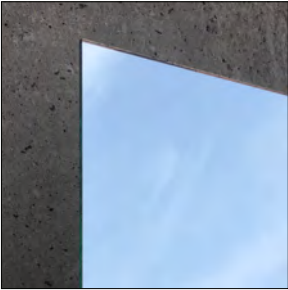
(NARRATIVE)  
Due to the asymmetry of its shape and the integration of downward facing reflective surfaces, the roof generates different ways of combining the environments above and below it.



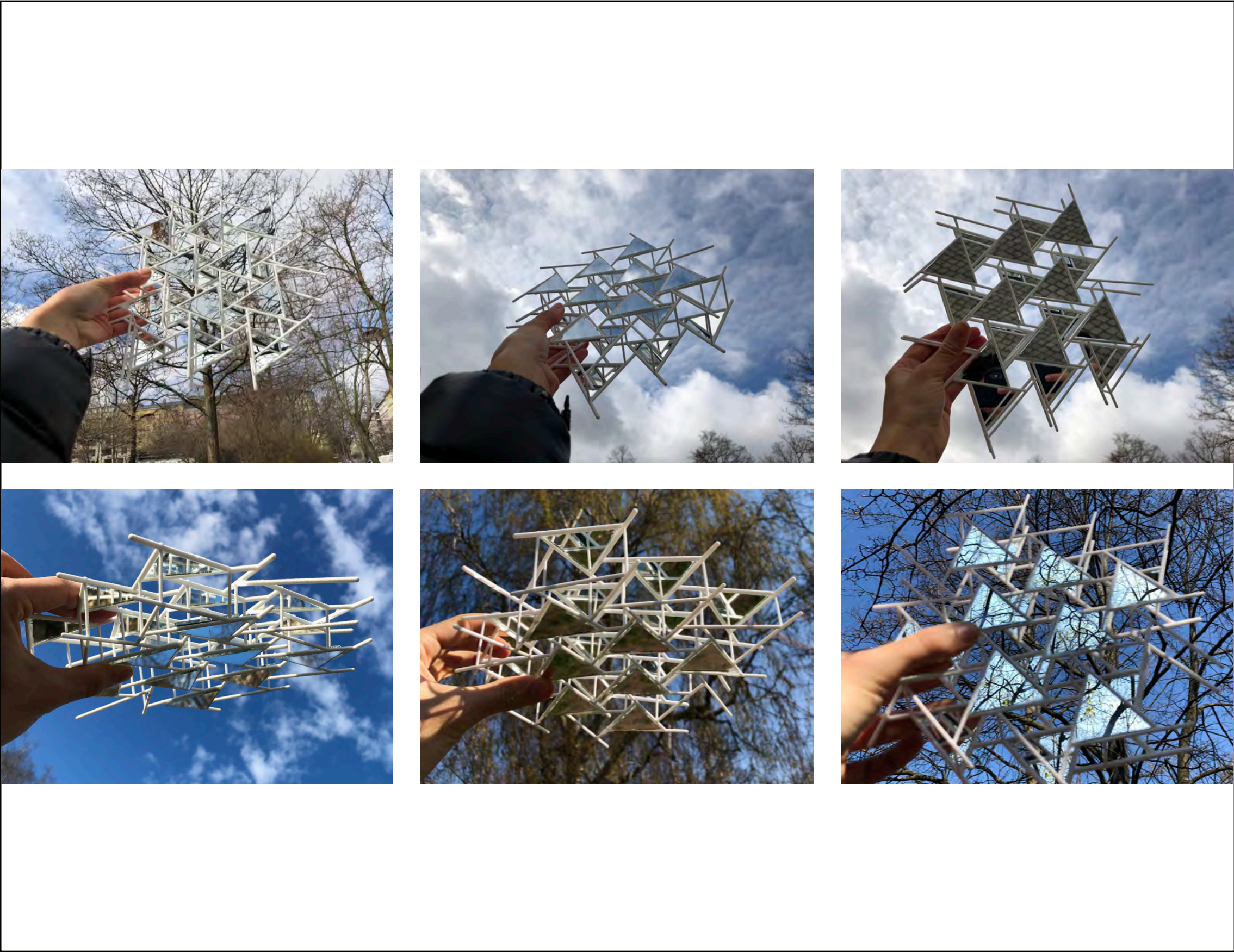
white coated stainless steel,  
hollow round section structure.



clear glass, triangular and  
hexagonal panels.



reflective triangular panels.





S  
O  
S

## Studio Other Spaces GmbH

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**ALBRIGHT-KNOX ART GALLERY**  
**PROPOSED ROOFING AND MASONRY REPAIRS**  
**TO 1905 & 1962 BUILDINGS**  
**BPB SUBMISSION**

April 9, 2019







Soprema Colphene 180 SP  
SBS sheet for EPDM roofing replacement

COLPHENE®  
180 SP

COLPHENE® 180 SP  
PRODUCT # 01219

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

COLPHENE 180 SP is an SBS-modified bitumen base ply for use in approved multi-ply membrane waterproofing assemblies. COLPHENE 180 SP is composed of a proprietary formulation of elastomeric styrene-butadiene-styrene (SBS) polymer modified bitumen and is reinforced with tough, dimensionally stable non-woven polyester mat. The topside is surfaced with fine mineral aggregate and underside is surfaced with polyolefin burn-off film to optimize heat welding.


STORAGE

Store rolls on end and maintain in an upright position to prevent damage. Store rolls in a clean dry location and cover as necessary to protect rolls from environmental damage such as extreme cold, heat, or moisture. Monitor varying environmental conditions during storage, handling and application of COLPHENE 180 SP.

APPLICATION

Prior to installation, unroll COLPHENE 180 SP onto the surface and allow to relax. Position COLPHENE 180 SP in desired position and back roll the product. COLPHENE 180 SP is then heat welded to approved substrates. Subsequent approved inter-ply or cap ply membranes are applied to COLPHENE 180 SP via cold adhesive or hot asphalt. Refer to SOPREMA's specifications and installation instructions for additional application guidelines.

APPLICATION




HEAT-WELDED

QUICK FACTS

ASTM STANDARD	LENGTH (ft)	WIDTH (in)	COVERAGE* (ft²)	THICKNESS (mils)	WEIGHT (lb)	ROLLS/PALLET (pallet weight)
D6164 <small>75k 1' (2538.5)</small>	48.2 <small>(14.78 m)</small>	39.4 <small>(1.00 m)</small>	147.6 <small>(13.7 m²)</small>	87 <small>(2.2 mm)</small>	86 <small>(39 kg)</small>	30 <small>(2,831.67 / 1331 kg)</small>

\*Coverage may be affected by actual conditions varying with wind and heat absorption rates.



www.soprema.us  
310 Quadral Drive, Wadsworth, Ohio 44291  
Tel: (866) 356-3521 | Tel: (330) 334-0086

COLPHENE®  
180 SP

TECHNICAL INFORMATION & TESTING

SHEET PROPERTIES

Reinforcement	Non-woven polyester		
Elastomeric bitumen	Proprietary blend of bitumen and SBS polymers		
Top surfacing	Sandbed		
Back surfacing	Polyolefin film		
Sealage surface	Polyolefin film		
Sealage width, in (mm)	3 (76)		
End lap, in (mm)	6 (152)		

DIMENSIONS & MASS


DIMENSIONS		TEST METHOD
Thickness, mils (mm)	87 (2.2)	ASTM D6147
Net mass per unit area, lb/100ft² (g/m²)	54 (2025)	ASTM D6147

PHYSICAL PROPERTIES


PROPERTY	80°F	100°F	TEST METHOD
Peak load @ 0°F (-18°C), lb/in (kN/m)	110 (9.3)	80 (14.9)	ASTM D6147
Elongation at peak load @ 0°F (-18°C), %	35	40	ASTM D6147
Peak load @ 75.4°F (23°C), lb/in (kN/m)	65 (14.9)	80 (11.4)	ASTM D6147
Elongation at peak load @ 75.4°F (23°C), %	55	60	ASTM D6147
Ultimate elongation @ 75.4°F (23°C), %	80	60	ASTM D6147
Tear strength @ 75.4°F (23°C), lb (N)	125 (556)	85 (378)	ASTM D6147
Low temperature flexibility, °F (°C)	-15 (-26)	-15 (-26)	ASTM D6147
Dimensional stability, %	< 0.5	< 0.5	ASTM D6147
Compound stability, °F (°C)	240 (116)	240 (116)	ASTM D6147
Hydrostatic head pressure	Pass		ASTM D3385
Water vapor permeance, perm (ng/m²·s·inHg)	< 0.004 (0.23)		ASTM E96 Procedure B
Puncture Resistance, min load, lb (N)	215 (956)		ASTM E154

\* Data is represented by average values, unless noted otherwise.


TESTING & APPROVALS



UL



FLORIDA BUILDING CODE



www.soprema.us

P010284 - REV. 09/017

Page 3 of 36

ELASTOCOL®

500

ELASTOCOL® 500  
PRODUCT # 035745

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

ELASTOCOL 500 is an asphalt based primer for use in approved multi-ply membrane and flashing assemblies. ELASTOCOL 500 is composed of a proprietary blend of asphalt, solvents and additives used to increase adhesion when using heat welding, cold adhesive or hot asphalt application methods.

STORAGE

Store in pail and maintain in an upright position to prevent damage. Store in a clean, dry location and cover as necessary to protect pails from environmental damage such as extreme cold, heat, or moisture. Monitor varying environmental conditions during storage, handling and application of ELASTOCOL 500.

APPLICATION

Mix prior to application. ELASTOCOL 500 is applied to the approved area via brush, roller or spray equipment. ELASTOCOL 500 is applied at a rate of 0.35 to 0.6 gallons per 100 square feet over non porous substrate. Refer to the SOPREMA SBS Roofing Manual for additional application guidelines.

QUICK FACTS

ASTM STANDARD	CONTAINER (gal)	COVERAGE RATE (gal/100ft²)
D41 (FBI)	5.0 (18.9L)	0.35-0.6 (0.35-0.6 US gal)

PRODUCT INFORMATION	
Description	Proprietary blend of asphalt and solvents
Installation	Spray, brush or roller
Packaging	5 gallon (18.9 L) pail

TESTING & APPROVALS

www.soprema.us  
310 Quadra Drive, Wadsworth, Ohio 44281  
Toll Free: (800) 356-3521 / Tel: (330) 354-0066

Printed in - Made in USA

ELASTOCOL®

350

ELASTOCOL® 350  
PRODUCT # 035846

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

ELASTOCOL 350 is a zero VOC, water based primer for use in approved multi-ply membrane and flashing assemblies. ELASTOCOL 350 is a proprietary polymer emulsion zero VOC primer used to increase adhesion when using heat welding, cold adhesive or hot asphalt application methods.

STORAGE

Store in pail and maintain in an upright position to prevent damage. Store in a clean dry location and cover as necessary to protect pails from environmental damage such as extreme cold, heat, or moisture. Monitor varying environmental conditions during storage, handling and application of ELASTOCOL 350.

APPLICATION

Mix prior to application. ELASTOCOL 350 is applied to the approved area via brush, roller or spray equipment. ELASTOCOL 350 is applied at a rate of 0.5 to 0.8 gallons per 100 square feet over non porous substrates. Refer to the SOPREMA SBS Roofing Manual for additional application guidelines.

QUICK FACTS

CONTAINER (gal)	COVERAGE RATE (gal/100ft²)
5.0 (18.9L)	0.5-0.8 (0.5-0.8 US gal)

PRODUCT INFORMATION	
Description	Proprietary polymer emulsion primer
Installation	Spray, brush or roller
Packaging	5 gallon (18.9 L) pail

TESTING & APPROVALS

www.soprema.us  
310 Quadra Drive, Wadsworth, Ohio 44281  
Toll Free: (800) 356-3521 / Tel: (330) 354-0066

ICC-11738 - Fall 9, 1998

## PD510243 - REV 001510

## FOI00037 - REV 001619



# ALSAN® RS

## 230 FLASH

ALSAN® RS 230 FLASH  
PRODUCT #

- 1-HD00230-000000-grdnc-1-coldblue-gray
- 1-HD00230-000000-grdnc-2-white-black
- 1-HD00230-000000-grdnc-3-petrol-gloss
- 1-HD00230-000000-grdnc-4-blue-black

## PRODUCT DATA SHEET

### DESCRIPTION & FEATURES

ALSAN RS 230 Flash is a high performance, rapid-setting, polymethyl methacrylate (PMMA) liquid resin for use in flashing applications. ALSAN RS 230 Flash is catalyzed with ALSAN RS catalyst powder and combined with ALSAN RS Fleece to form a flexible, monolithic, reinforced membrane.

### STORAGE

Always store closed containers in cool, ventilated and dry locations away from heat and oxidizing agents. Do not store in direct sunlight or in temperatures below 32°F (0°C) or above 77°F (25°C). Approximate shelf life is twelve months from date of shipment when properly stored, sealed and unopened.

### APPLICATION

ALSAN RS 230 Flash is applied by brush or roller. Prior to application, refer to published specifications and approved details for complete application instructions. The applicator is responsible for ensuring conditions are appropriate to proceed with proper application methods.

APPLICATION

BRUSH

ROLLER

QUICK FACTS

UNIT SIZE (kg)	AMBIENT TEMP. (°F)	SUBSTRATE TEMP. (°F)	RESIN TEMP. (°F)	POT LIFE (min)	RAIN PROOF (min)	NEXT LAYER (hour)	FULLY CURED (hour)
12 (#10.6)	23-95 (-5 to 35°C)	23-122 (-5 to 51°C)	37-86 (3 to 30°C)	15-20 (#10 to 30°C)	30-45 (#10 to 30°C)	1-1.5 (#10 to 30°C)	3-6 (#10 to 30°C)

**SOPREMA**

www.soprema.us  
310 Quaker Drive, Wadsworth, Ohio 44281  
Toll Free: (800) 356-0521 / Tel: (330) 334-0066

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310 Quince Drive, Wadsworth, Ohio 44281  
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## FD-310(238)-REV. 03-15-19

## PDS10050 - REV. 3/2018

www.soprema.us  
310 Quadral Drive, Wadsworth, Ohio 44281  
Toll Free: (800) 356-3521 | Tel: (330) 354-0066



Cathedral Stone - Jahn M120  
Stone patching compound

Edison Coatings - Custom SYSTEM 45  
Stone patching compound

**JAHN M120**  
• Marble Repair Mortar

**CERTIFIED INSTALLERS ONLY**

This single-component, cementitious, mineral based mortar is designed for the restoration of marble. Jahn M120 is completely vapor permeable and contains no latex or acrylic bonding agents or additives. M120 is formulated for compatibility with the marble substrate and is available in Standard, Premium, and Custom Colors. M120 provides a permanent solution, which both restores and protects the beauty of the marble. (Only Certified Installers may purchase Jahn M120 Marble Repair Mortar.)

**Features and Benefits:**Single-Component. Mixes with water only, improving quality control and consistency of application.

**Compatible Formulations:** Compatibility of physical properties ensures that the mortar and natural substrate react to the environment in the same way.

**Contains No Latex or Acrylic Bonding Agents:** It protects the substrate by allowing salts, water vapor, and liquid water to reach the surface, preventing failure due to salt expansion or freeze/thaw cycles.

**Tenacious Adhesion:** Strong bonding capabilities without relying on synthetic bonding agents.

**Factory Controlled:** No field chemistry resulting in product variations.

**Custom Colored Upon Request:** Closely matches existing masonry. Choose from Standard or Custom Colors.

**Certified Installers:** Only installers with certification from Cathedral Stone Products can purchase Jahn M120 Marble Repair Mortar.

**Application Procedures:**  
**Surface Preparation**  
Surfaces to receive M120 must be sound and free of all dust, dirt, grease, efflorescence and/or any other coating or foreign substance which may prevent proper adhesion. Remove all loose and delaminated masonry from the repair area using manual or pneumatic cutting tools. The area to be repaired should be cut to provide a minimum of 1/2" depth. Do not install repairs that have a feathered edge (see diagram in the next column), incorrect installation will cause repairs to fail prematurely. Wash the prepared surface with clean water and a bristle brush to remove dust from the pores.

**Section: Correct (Square Cut) Surface Preparation**

**Section: Incorrect (Feathered Edge) Surface Preparation**

**Exposed Ferrous Metals:**  
In the event that ferrous metal reinforcement (rebar, threaded rod, etc.) is exposed within the repair area or repairs are adjacent to ferrous metal (joints, ties, anchoring systems etc.), the Corotech V160 Surface Tolerant Epoxy Mastic Line must be applied to all properly prepared ferrous metal surfaces before repairs are made. Refer to the Technical Data Sheets within Cathedral Stone's Product line for proper preparation and use of the Corotech V160 Surface Tolerant Epoxy Mastic.

**Mixing**  
The mixing ratio is approximately 4 to 4 1/2 parts powder to 1 part water by volume (or until material is easy to spread), depending on temperature and humidity. More water may be required as ambient temperature rises. The mixing may be done by hand, stirring until the mortar is thoroughly mixed. The mortar should be the consistency of damp sand. M120 may also be mixed using a slow speed drill (400 - 600 rpm) equipped with a Jahn-type mixing paddle. For best results, add the powder to the water slowly. The working time will vary, depending upon wind, temperature, and humidity. Using excessive water in the mixture may affect the color of the repair.

**Application**  
Moisten the substrate using clean water. Jahn Mortar should be applied to a glazing wet surface in vertical applications and a well-dampened surface (with no pooling water) on horizontal applications. If the surface is allowed to dry out before applying M120, this step must be repeated. This is very important.

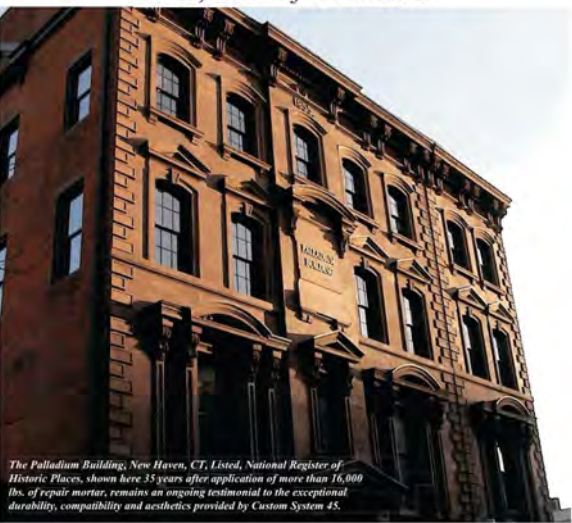
The next step of the application is what CSP has termed "Peened Butter" coat. The Jahn mortar should be mixed with

**Cathedral Stone® Products, Inc.** 7266 Park Circle Drive, Hanover Maryland 21076  
(800) 684-0901 FAX: (410) 782-6155 WEBSITE: www.cathedralstone.com

**Edison Coatings, Inc.**

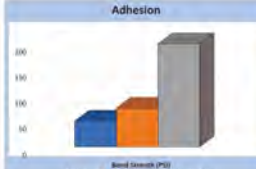
**Custom SYSTEM 45**

**Composite Repair Compounds for Stone, Masonry & Concrete**

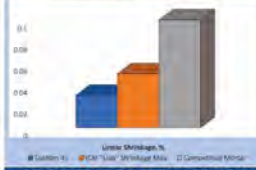


*The Palladium Building, New Haven, CT, listed, National Register of Historic Places, shown here 35 years after application of more than 16,000 lbs. of repair mortar, remains an ongoing testament to the exceptional durability, compatibility and aesthetics provided by Custom System 45.*

**Adhesion**



**Shrinkage, ASTM C531**



**LINEAR COEFFICIENT OF THERMAL EXPANSION**

Substrate	45	Substrate Grade	Coefficient	Custom 45 Coefficient
Limestone	SD	2.5-6.7	8.1	8.1
Sandstone	SD	4.5-6.7	8.0	8.0
Terra Cotta, Brick	TC	3	4.1	4.1
Marble	MB	3-5	4.7	4.7
Granite	GR	3-6	5.0	5.0
Concrete	CN	6-8	7.0	7.0

**COMPRESSIVE STRENGTH (1000 PSI, 28 Day Cure)**

45 Grade	Compressive Strength (psi)
LC	4200
TC	2900
SD	2700
GR	3000
CN	3700
MR	4300

**Dimensional Stability:** Practical field experience indicates that materials exhibiting high drying shrinkage are likely to crack and fail prematurely. *ICRI* Guide No. 320.28 encourages the use of materials with low shrinkage, which is defined as less than 0.04% drying shrinkage. Custom SYSTEM 45 meets this requirement, without the use of expansive components or formation of ettringite to compensate for shrinkage. The result is low stress cure and crack free, durable repairs.


**Consistency:** Custom SYSTEM 45 is more reliable and consistent in appearance and performance than competitive non-latex mortars or simple field-mixed mortars. Color, composition and quality are rigidly controlled in the manufacturing process, and critical ingredients are single-sourced to eliminate variations, even on projects extending over months or years and requiring many production batches. The two components are simply mixed together and applied, eliminating any influence by varying aggregate, aggregate, cement or water compositions. Under most normal application conditions, proper curing and strength are achieved without special procedures or prolonged wet curing.

**Permeability:** Custom SYSTEM 45's latex-cement matrix retains excellent moisture vapor permeability (>20 perms at 1/8" depth), avoiding moisture entrapment at the patch/substrate bond line. Liquid moisture permeability is comparable with substrate permeability, allowing repairs to meet the dual objectives of restoring building envelope integrity against moisture infiltration, while allowing internal moisture to escape harmlessly.


**Thermal Expansion:** Coefficient of thermal expansion for each grade of Custom SYSTEM 45 is matched to expansion coefficients of the substrate, allowing long-term durability to exterior exposures which are subject to wide temperature variations.

**Composition:** Part "A" (Restoration Latex, RL-1) is a unique, proprietary self-crosslinking acrylic emulsion. Part "B" is a cement-based blend of select graded aggregates, additives, fillers and pigments, with performance and workability-enhancing admixtures. No chlorides, added gypsum or corrosive or deleterious additives are used.


**Workability:** Products are formulated for excellent workability under a wide range of repair situations. Product is not formulated for fast set or rapid hardening, permitting fine tooling, carving, shaping, grinding or sculpting in the period following initial set. Standard non-sag consistency allows unsupported build-up of up




Custom SYSTEM 45 using RL-2 form and pour application at 250 Park Ave, NYC. Anchor system installed into Terra Cotta.



Finishing the form in place.



Pouring Custom SYSTEM 45 into form.



Glazed with Elastovall 351 to match original Terra Cotta.

**a. Priming:** For best adhesion, do not apply product to dry surfaces. Slurry coating is the preferred method of priming, using a thin brush coating of 1 part Custom 45 liquid and 3 parts powder. For best results, apply patching mortar immediately after priming. Do not allow slurry coat to dry out before patching mortar placement.

**b. Mixing:** Best results are obtained when Part A and B are mixed together at consistent proportions. Determine the powder to liquid

Jahn M120  
Page 2

water to the consistency of wet putty. Apply the "Peened Butter" coat to the glazing wet substrate approximately 1/8 inch thick. Important - To achieve proper bond, the "Peened Butter" coat must not dry out prior to application of Jahn Mortar (4:5:1 mix). Since the working consistency of M120 is somewhat wet, large repairs may require successive applications in order to avoid material slump. If this is necessary, be sure to remove the shiny cement skin that sometimes forms on the surface by scraping away 1/16" of material. This will open the pores before an additional layer of material is applied. Build up material beyond the surface of the original stone. The waiting period before finishing will vary, depending upon wind, temperature, and humidity. After achieving initial set, scrape away excess mortar until the desired profile is reached.

**Curing**  
Periodically mist M120 repairs using clean water for at least a 72-hour period. The timing for initial misting will vary with ambient conditions. Hot, dry conditions may require misting in 30 to 60 minutes. Cooler, damp conditions may require waiting several hours before beginning the curing process. Mist several times a day. Should access to the repairs be impossible over a period of time, plastic may be used to cover them temporarily. The application of plastic, however, does not remove the need for normal curing techniques.

**Clean Up**  
Remove uncured mortar from the perimeter of the repair before it dries using clean water and a rubber sponge. Repeat several times with clean water to prevent a halo effect (staining of adjacent masonry). Cured mortar may only be removed chemically or mechanically.

**Safety Requirements**  
It is recommended that safety goggles, gloves, and a dust mask equipped with P-2 filters (or equivalent) be worn for protection while mixing.

**Limitations**  
Do not apply Jahn Mortar to frozen or exceedingly hot substrate. The applied mortar may be protected from extreme heat, freezing, excessive wind, direct sunlight, and rain. Ambient temperature range should be 40° F to 90° F with low to average humidity. Do not add bonding agents to Jahn Mortar or use them as surface preparation materials. Minimum thickness of mortar application is 1/2".

**Packaging and Coverage**  
A 5-gallon plastic pail contains approximately 44 lb. of material. This will cover 0.5 cubic feet (12 square feet at 1/2" thickness).

**Storage And Shelf Life**  
Store material in a dry area away from direct sunlight. Ambient storage conditions should be in the range of 40° F to 90° F with low to average humidity. Average shelf life is 10 years in original, unopened, sealed containers.

**Technical Data**  
Jahn M120 - Marble Repair Mortar

LIQUID / PLASTIC PHASE	
Ratio of water: dry material	3 fl. oz. to 4.5 lb.
Volume per pound mixed mortar	12.0 fl. oz./lb.
HARDENED PHASE	
Compressive strength	4700 to 5000 psi
Tensile bending strength	650 psi
Tensile strength	150 psi
Linear coefficient of thermal expansion	1.0E-06 to 0.2E-06 in/inches °F
Modulus of elasticity	1200 to 1540 ksi
Open porosity, (%)	4.2 to 16.5
Specific gravity	1.3

**Warning**  
Not for internal consumption. Keep out of reach of children and animals. Consult Material Safety Data Sheet (MSDS) for specific information. Notice: The information contained herein is based on our own research and the research of others, and it is provided solely as a service to help users. It is believed to be accurate to the best of our knowledge. However, no guarantee of its accuracy can be made, and it is not intended to serve as the basis for determining this product's suitability in any particular situation. For this reason, purchasers are responsible for making their own tests and assume all risks associated with using this product.

03/2014

**Custom SYSTEM 45**

Edison Custom SYSTEM 45 products are two-component, latex-modified, cementitious compounds used to produce highly durable and compatible aesthetic repairs to masonry and concrete. They may also be used as stone-like finishes on a variety of other substrates.

Over the course of over three decades of successful application on historic restoration projects, Custom SYSTEM 45 masonry repair mortars have been matched to thousands of different types and colors of natural stone, concrete and clay masonry. Ten distinct base formulas are used:

TYPE	SUBSTRATE
RL	RESTORATION
MR	MARBLE
CN	ARCHITECTURAL CONCRETE
GR	GRANITE
LC	LIMESTONE & CALCAREOUS CAST STONE
SD	SANDSTONE
TC	TERRA COTTA & BRICK
MB	MARBLE
SD	SANDSTONE & BROWNSTONE
SL	SLATE
TC	TERRA COTTA & BRICK

For custom masonry repair mortars, refer to the product data for SPEC-JOINT 46. For complete cement plaster replacement systems, refer to the product data sheet for CEM-PLAST 54. For natural cement systems, see *Renaissance Natural Cement Products*.

In each case a mechanically compatible composition is prepared, based on suitable aggregates of similar composition, color and gradation to the material being repaired. Final color adjustment is achieved, where required, using low levels of highly stable inorganic pigments and fillers.

Custom SYSTEM 43 has provided durable, inconspicuous repairs on a wide variety of structures, including churches, schools, monuments, post offices, courthouses, university buildings, hospitals, libraries, railroad stations, apartment buildings, hotels, office buildings and private residences.

**RL-SERIES RESTORATION LATEXES**  
RL-1 STANDARD, PRIMER GRADE  
RL-2 CASTING & COATING GRADE  
RL-3 MARINE & IMMERSION GRADE  
RL-4 HIGH PERMEABILITY GRADE  
RL-5 HOT WEATHER GRADE  
RL-6 COLD WEATHER GRADE  
RL-7 SCULPTING GRADE

**FEATURES:**

- High Adhesive Bond Strength
- High Dimensional Stability
- Substrate-Specific Coefficient of Thermal Expansion
- Low Modulus of Elasticity
- Compatible Liquid and Moisture Vapor Permeability
- Natural Appearance
- Excellent Workability

All of these properties influence the long-term performance and compatibility of the repair with the substrate.

**High Tensile Bond Strength (Adhesion)**  
Tensile adhesion to all types of properly prepared concrete and masonry surfaces is a primary performance requirement for any repair material. High tensile bond strength is of primary importance, because the other performance properties are irrelevant if the product is no longer bonded to the substrate.

**Low Modulus of Elasticity ("Stiffness")**  
Of critical importance to the durability of masonry repair materials is the elimination of stress between the repair mortar and the host substrate. Materials which are low in modulus of elasticity (low in "stiffness") deform to relieve stress, as opposed to more rigid, higher modulus materials which may distress adjacent low strength substrates.

Custom SYSTEM 45 latex-modified mortars can achieve compressive strengths similar to the substrate being repaired while maintaining lower modulus than the host material. This assures that the repair mortar always behaves as the softer material, relieving stress and preventing damage or premature failure.

**Appearance:** Excellent aesthetic results are achieved, because color and texture are closely matched to the existing masonry. Repairs can be virtually indistinguishable from original work, and both accelerated weathering (ASTM G154-16) and natural exposure testing assure long-term color retention. Formulations are UV-stable and nonfading.

**Compatibility:** Products are non-corrosive, non-flammable, non-combustible and contain no toxic solvents, monomers or diluents. Low odor allows interior as well as exterior application. Powder components are formulated and graded to exclude toxic respirable crystalline silica.

to 2" on vertical surfaces without sagging, up to 1 inch on overhead applications. Optional RL-2 superplasticized grade liquid allows material to be cast in forms without changing strength or color.



Custom SYSTEM 45 sandstone grade during travel application at 21 Astor Place, NYC.



Custom SYSTEM 45 carved like tool-dressed stone at 21 Astor Place, NYC.

**THE COLOR & GRADE SELECTION PROCESS**

Custom SYSTEM 45 is available in 10 standard grades and over 3000 colors. Test kits and custom color matching services are available at nominal costs. For best results, send cleaned samples of the substrate to be repaired to Edison Coatings, Inc. for free evaluation.

The following are key elements in successful color selection:

1. **Choose representative samples for matching.** Choose color on the basis of the actual range of colors on the building. Samples should be cleaned in the same manner, using the same cleaning agents that will be used for general building cleaning. Identify the portion of the sample to be matched by circling the representative area, or by placing an "X" in a corner of the slide to be matched.
2. **Use multiple colors.** Stone and masonry are often variable in color, and better overall match is often achieved through use of more than one color of Custom SYSTEM 45. Intermediate shades can be produced by blending light and dark shades of Custom SYSTEM 45 in any proportion.
3. **Install test patches.** The most accurate way to evaluate visual compatibility is through in situ test patching. Allow adequate cure time before final evaluation. Initial color should be darker than the substrate.

**APPLICATION:**

1. **Surface Preparation:** Durable, effective repairs require clean, sound substrates. Remove all contaminants, loose material, weathered material and inappropriate previous repair mortars. If large or deep repairs will be otherwise unsupported, mechanical keying or anchoring is recommended.
2. **Minimum repair depth is 5". Maximum depth is dependent on application.**

The decision to anchor should be based on structural requirements, the condition of the substrate, patch dimensions and weight, and the extent to which patch integrity will otherwise rely on adhesion alone. Such decisions and details concerning spacing and configuration are frequently best made in consultation with a qualified professional. Good restoration practices should always be observed.

**Worker Training:** Edison Coatings conducts "hands-on" training workshops on a regular basis. This optional course helps workers achieve optimum results with maximum efficiency. "On-Site" training is also available, to help entire crews achieve high-quality, cost effective repairs and to address job-specific challenges. Current workshop schedules can be found on our web site "Calendar" page and additional information on "in-house" and "on-site" programs can be found on the "Training" page at [www.edisoncoatings.com](http://www.edisoncoatings.com).

**Substrate:** Products are non-corrosive, non-flammable, non-combustible and contain no toxic solvents, monomers or diluents. Low odor allows interior as well as exterior application. Powder components are formulated and graded to exclude toxic respirable crystalline silica.

preparation which works and handles best for your particular application and Custom SYSTEM 43 formulation, and then measure the same proportions for each mix. Mix ratios are generally between 5:1 and 7:1 by weight, or between 3 qts. (3 liters) and 4 quarts (5 liters) per 45-pound (20 kg) pail. Good results can also be obtained by thorough hand mixing. Do not mix more material than can be applied in about 15 minutes. Product will adhere and "hang" most effectively if not mixed too wet.

**c. Cold Weather:** Minimum temperature for optimum color control is 50°F (10°C). While good mechanical results are obtained at temperatures above 40°F (4°C), color development tends to be lighter at low temperatures. For optimum color control, temperature must be above minimum at time of application, and must be maintained until product has dried thoroughly. Drying time may vary from an hour or two (thin patches, warm and dry weather) to several days (deep patches, cool and damp conditions).

At temperatures below 50°F (10°C), use of RL-4 winter grade latex is recommended to accelerate curing. Stone SYSTEM 45 components in a heated area until just before use. Do not patch frozen surfaces. Hot water rinsing of surfaces can help achieve minimum temperatures under marginal conditions. If auxiliary heating is used, do not direct hot exhaust gases at patches. Moderate temperatures and air flows work best, and heated air is preferable to burner exhausts, which are high in CO and CO<sub>2</sub>.

**d. Hot Weather:** Stone materials in a cool place, out of direct sun. Dampen surfaces thoroughly with cold water prior to application to reduce suction and slow product drying. Do not thin excessively or retemper with additional liquid or water. To improve hot weather workability, shade work areas from direct sun, and use Restoration Latex RL-5 to extend working time. Lightly mist surfaces or drape dampened burlap to allow a minimum of 2 hours' moisture after application. Over-damped or rapidly-dried surfaces may develop plastic cracking shortly after application. Remove and replace any such cracked patches.

**e. Interruption:** If work will be interrupted due to damp weather or other limitations, always try to work to an inconspicuous "break", such as a column line or ledge.

**f. Color Blending:** On masonry exhibiting unit-to-unit color variations, more than one custom color may be needed to achieve

inconspicuous repairs. Generally, varied blends of patch colors are less conspicuous than a single, uniform repair color. Alternatively, an intermediate shade should be selected, and color shading can later be achieved using EXPO 43 cement-based staining or liners) per 45-pound (20 kg) pail. Good results can also be obtained by thorough hand mixing. Do not mix more material than can be applied in about 15 minutes. Product will adhere and "hang" most effectively if not mixed too wet.

**g. Finishing & Carving:** Product set is not accelerated. Build material steadily, using a light sweeping motion, and allowing material to "fatten" for several minutes between applications. Finishing times may be varied to suit the mechanic, and while some prefer to tool and finish immediately, while product remains in a plastic state, others prefer to wait until initial set, typically an hour or so after application. Product is easily shaved in this stage of hardening but may be covered at any time after application. Some additional finishing is also possible the following day. For very deep repairs, consider forming and pouring full-depth in a single application using Custom System 45 mixed with RL-2 Restoration Latex.

**h. Curing:** Product should be allowed to dry cure after a brief initial moist period. Do not steam clean or pressure wash patches which have not fully cured. Application in direct sun will produce temporarily robust colors, which will tone down to the "normal" color after a brief period of natural exposure. Color adjustment can also be achieved during cure by application of SYSTEM 98-W-Color or EverKote 388. SYSTEM 98-W-Color is also available in several translucent shades which simulate the patina of aging. In grave repairs a more "weathered" appearance. For best long-term durability, SYSTEM 98-W can be applied to all masonry and patch surfaces.

**i. Storage & Handling:** Proper care should be taken when handling cement-based materials, to avoid skin and eye contact and avoid breathing dust. Some formulations contain free silica, and proper NIOSH-approved silica dust filters should be used. Products should be stored in a dry place, off the ground or floor, at moderate temperatures. KEEP FROM FREEZING. For complete safety and handling information, refer to Material Safety Data Sheets furnished with this product. Shelf life for properly stored material is minimum of 1 year from date of production.

FOR COMMERCIAL & INDUSTRIAL USE

**Edison Coatings, Inc.**

3 Northford Drive, Plainville, CT 06061  
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E-mail: [edisoncoatings@earthlink.com](mailto:edisoncoatings@earthlink.com) Internet: [www.edisoncoatings.com](http://www.edisoncoatings.com)

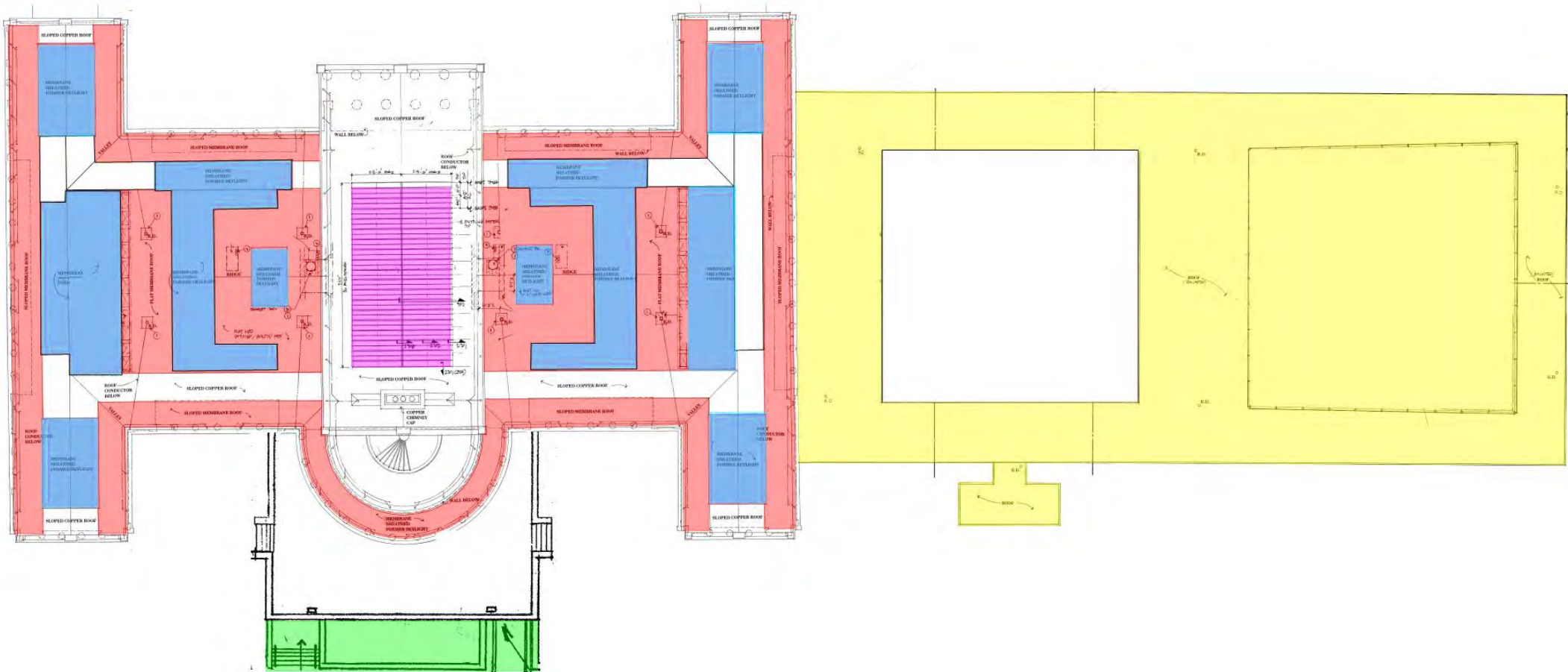
Revised: 03/2019

Edison Coatings products are for commercial use only. In case of defect in manufacture or packaging, materials will be replaced at no cost. No other warranty, except for such replacement, extends or is implied as to effect. Any implied warranty of merchantability or fitness for a particular purpose is expressly disclaimed. Although information and advice are provided in this publication, they do not constitute performance specifications and are obligations or liability is assumed for advice given or results obtained. Product formulations and performance characteristics are subject to change without notice. Color variations may be observed in the finished work.



1905 BUILDING

Interventions



- 1962 Modern wing added (yellow highlight).
- 1962 Granite stairs at west patio are removed (green highlight).
- First round of windows filled in (based on 1962 drawing notes).
- 1962 Remaining windows filled in.
- Lower slopped copper roof is over-coated with liquid-applied waterproofing (based on 1997 photos pre-EPDM).
- 1997 EPDM rubber roofing installed (red highlight).
- Skylights covered over (blue highlight).
- Vault-lights in loggia covered over with sheet metal (based on 1997 photos pre-mod-bit roofing).
- 1997 Sheet metal over vault-lights covered over with mod-bit roofing.
- 1997 Skylight replaced over central bay (purple highlight).
- Sealant installed into mortar joints.

1905 BUILDING

Batten-seam sheet metal roof

**Existing Condition:** Photos showing deteriorated sheet metal roofing with open joints/ seams and signs of previous repair programs. The sheet metal roof was recently found to be the origin of leak that damaged a painting in the gallery. Sheet metal roof is 114 years old and as such past its expected service life.





1905 BUILDING

Batten-seam sheet metal roof

**Proposed Scope:** Retain the existing sheet metal roof. Overcoat with liquid-applied reinforced membrane in color to match existing copper patina; overcoat is recommended to retain the historic batten-seam aesthetic while extending the life of the deteriorated fabric. This has been performed successfully at other Landmarked buildings, examples show HR Richardson Complex in Buffalo (photos left) and the Helmsley Building in NYC (photos right).



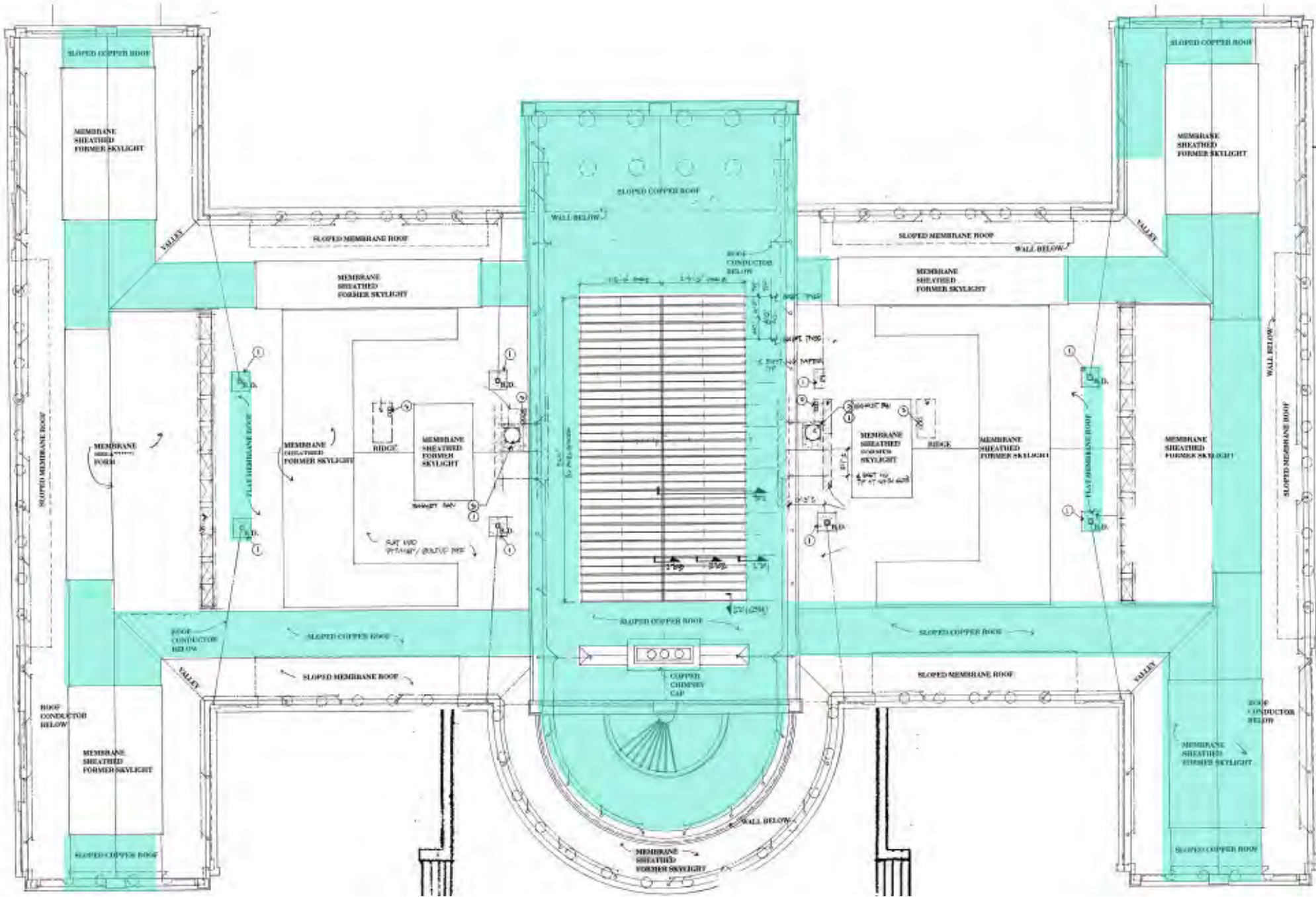


1905 BUILDING

Batten-seam sheet metal roof

Area of Existing Copper Roof to be Over Coated.

See pages 4 and 5 for roofing membrane cut sheets.





1905 BUILDING

EPDM Roofing

**Existing Condition:** EPDM membrane which was installed in the 1990’s is past its expected service life with leaks and failures occurring regularly. The membrane is no longer under warranty and the Museum would like to replace the roof membrane to obtain a long term warranty.

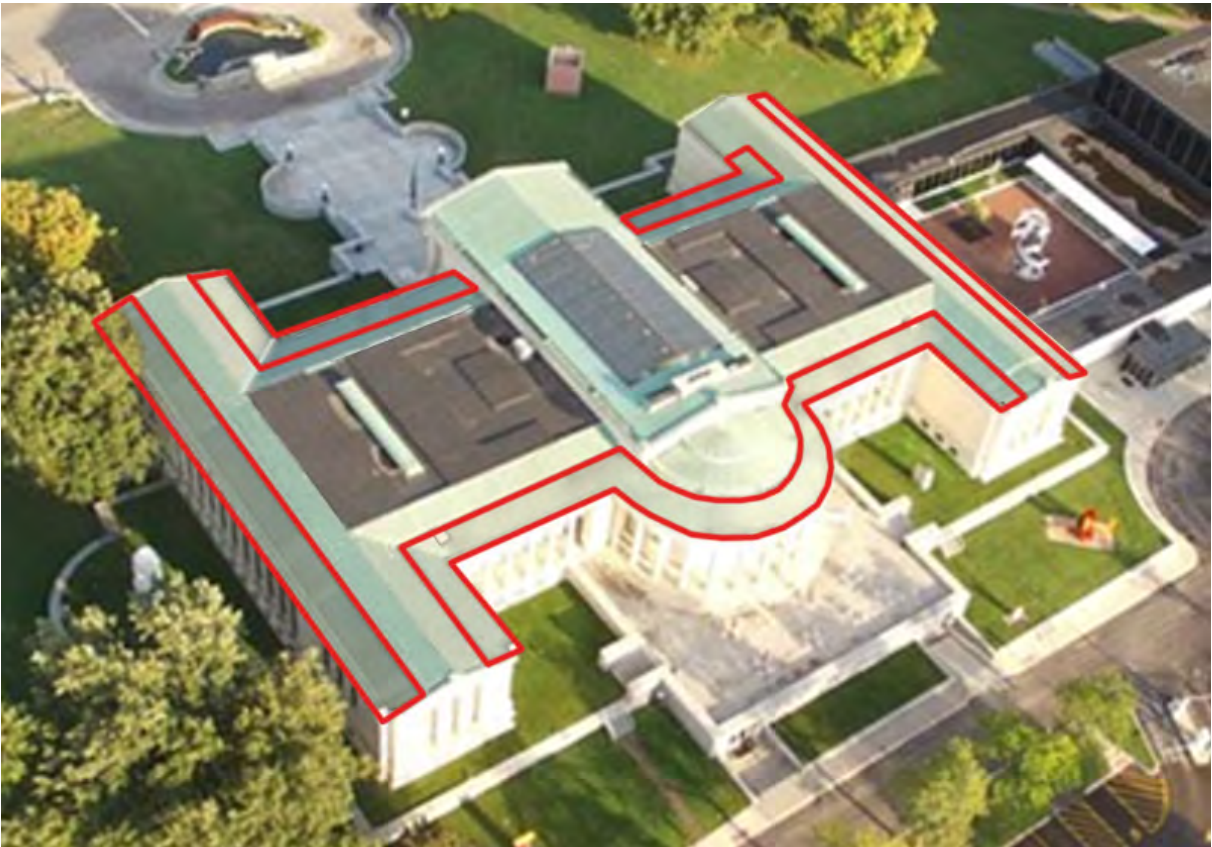




1905 BUILDING

EPDM Roofing

**Proposed Scope:** Remove and replace existing EPDM rubber membrane roofing with a liquid-applied reinforced roof membrane and SBS base layer that is more appropriate for a building that houses priceless works of art. Color of the membrane to match the patina of the original copper roof at visible areas, which the EPDM roofing replaced. Photo on left shows existing roof patchwork of historic copper and EPDM roofing while photo on right shows photo-montage of proposed design intent, which recalls the original appearance of the roof.



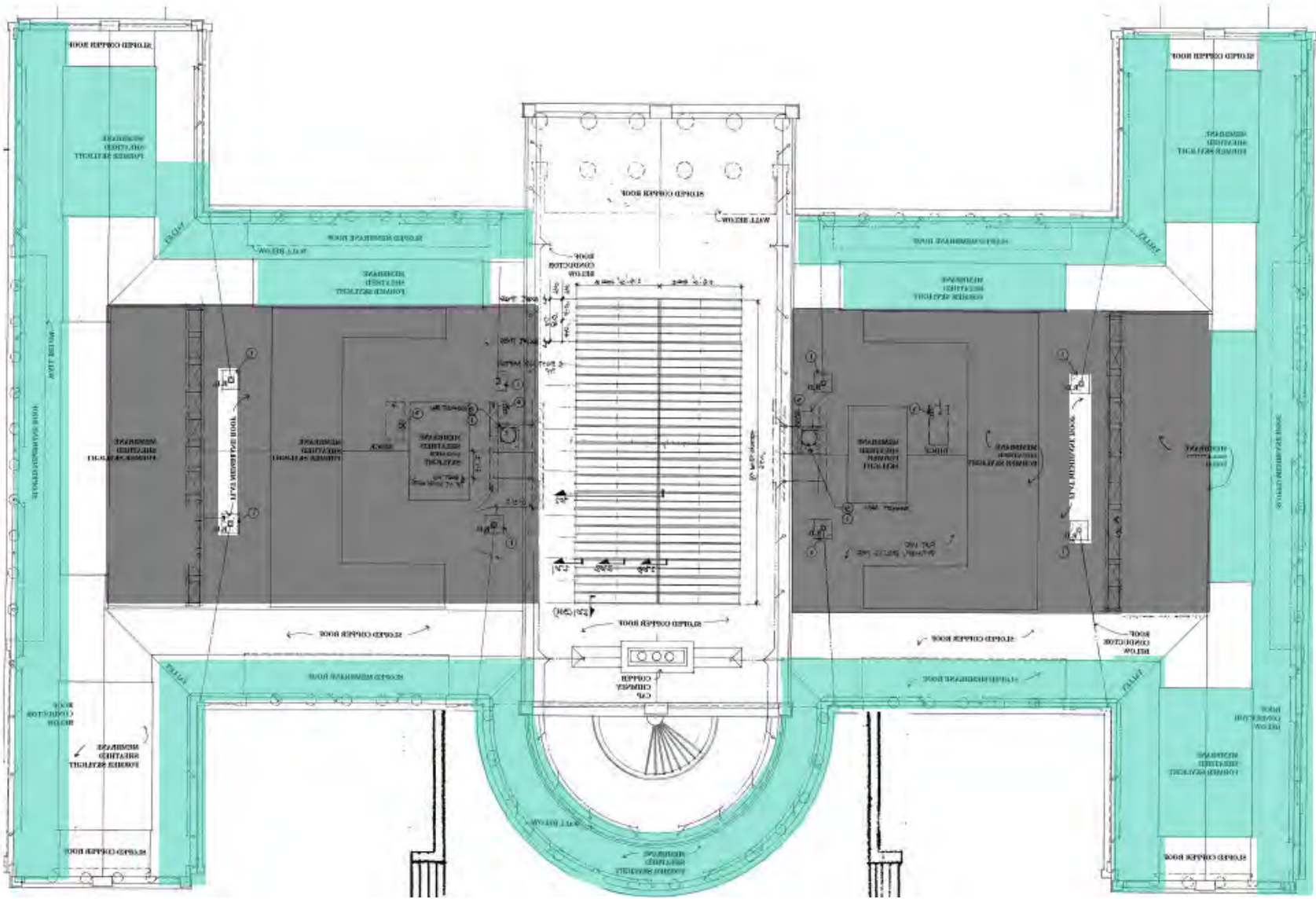


1905 BUILDING

EPDM Roofing

Areas of EPDM Roofing to be Replaced with Liquid Reinforced Membrane.

See pages 3-5 for roofing membrane cut sheets.



**LEGEND:**

SLOPED ROOFS

FLAT ROOFS

1905 BUILDING

Ornamental Crest

**Existing Condition:** Crest is in a state of advanced deterioration.

**Proposed Scope:** Further survey of the crest to be performed prior to removals.

Temporarily remove and salvage the historic ornamental crest to allow replacement of the EPDM roofing. The crest is to be removed delicately and salvaged for reinstallation. The crest will require significant repairs and reinforcement, with new matching stampings being provided at localized areas as required. All new stampings to be 16oz copper mill finish; patina will return after natural oxidation over approximately 15 years, rather than being artificially patinated.

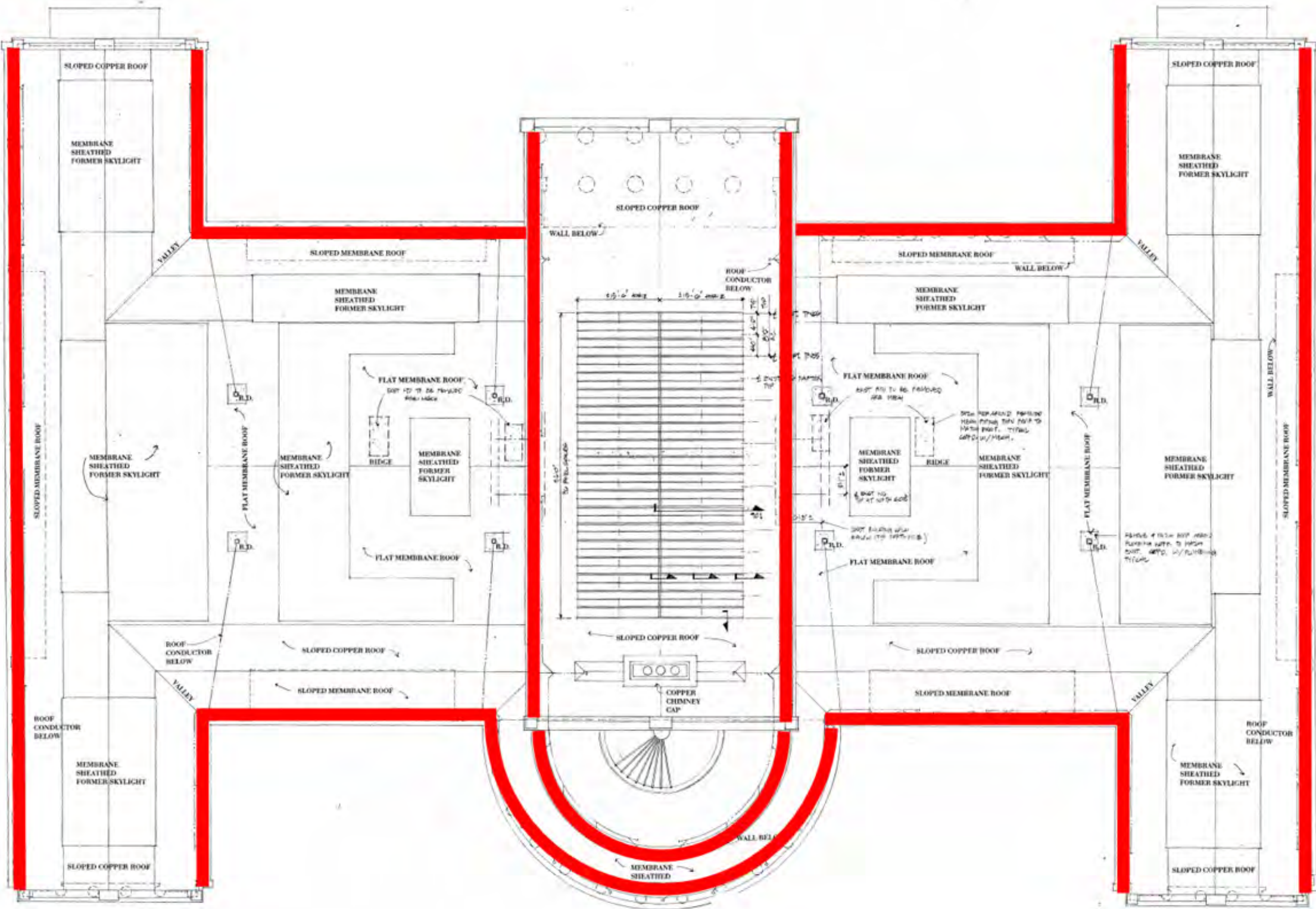




1905 BUILDING

Ornamental Crest

Areas of Repairs



1905 BUILDING

Loggia

**Existing Condition:** walkway membrane is compromised and appears to be an ad-hoc attempt to stop water infiltration without proper detailing.

**Proposed Scope:** remove all non-historic membranes and replace with a liquid reinforced membrane with SBS base layer. Color to match existing marble paving at the hemicycle loggia. The original floor surface was a cast iron vault-light with prism glass infills.

See pages 3-5 for walkway membrane cut sheets.

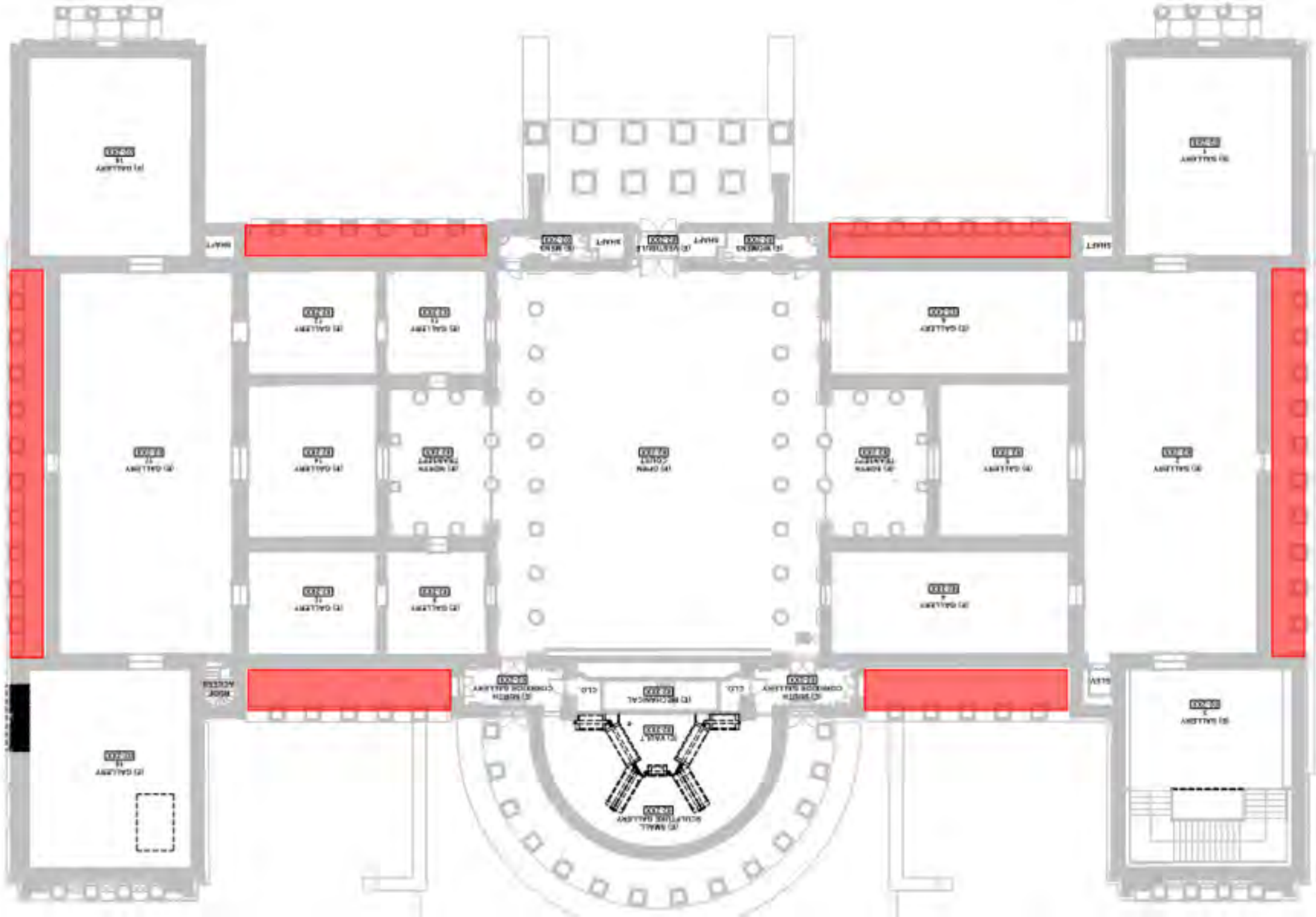




1905 BUILDING

Loggia

Areas of Loggia Roofing to be Replaced

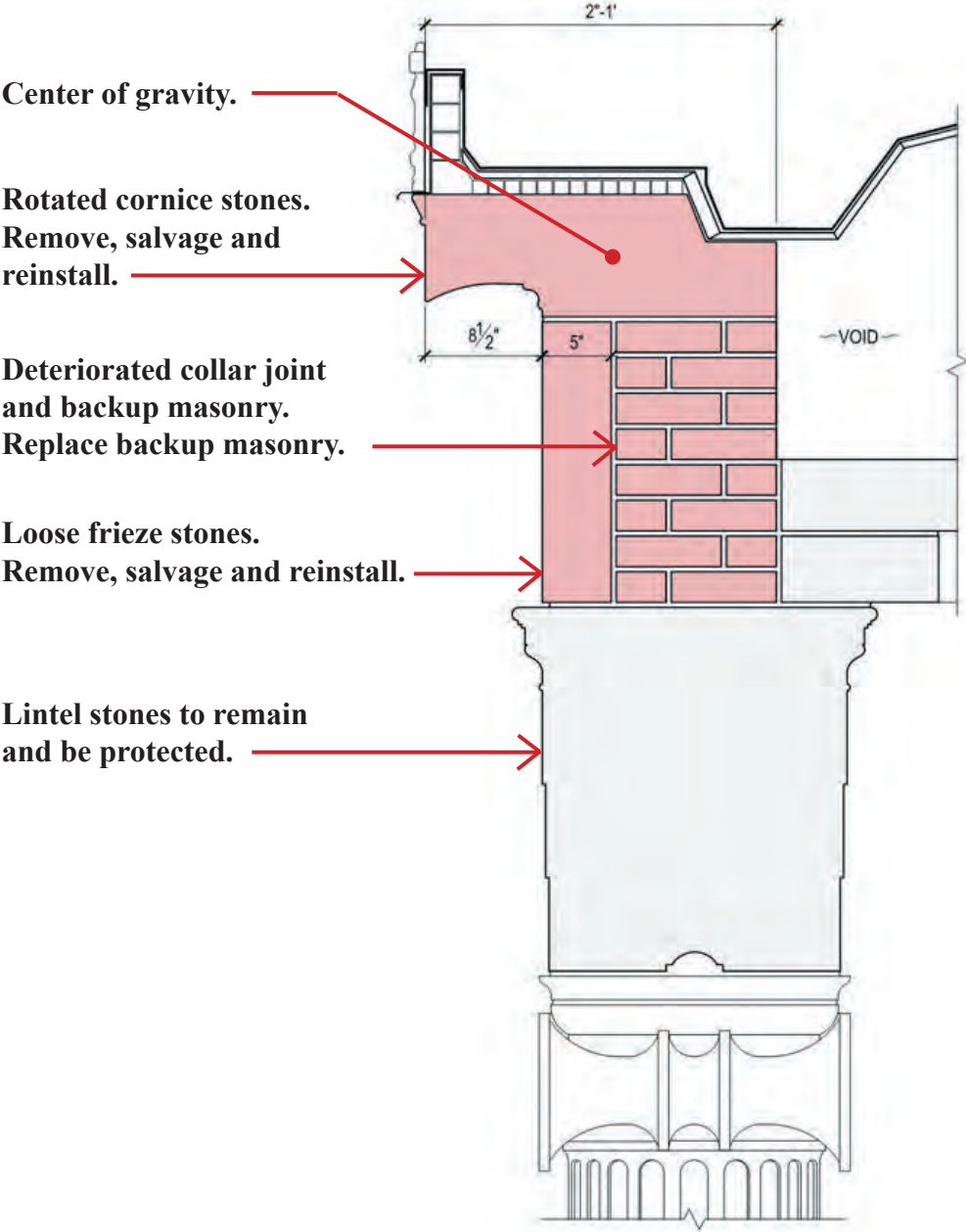


1905 BUILDING

Stone Displacement Hemicycle Cornice

**Existing Condition:** Stones at the cornice were observed rotated outward away from the building. Rotation was found to be caused by water infiltration at the roof above which lead to freeze-thaw action to the underlying mortar. No lateral restraints, in tandem with the poor center of gravity of the cornice stones, lead to the rotation of the units (the frieze stones below were also found to be loose).

**Proposed Changes:** Address water infiltration issues by replacing the roofing. Remove, tag and salvage historic stones. Repair underlying brick masonry and re-install historic stones with mortar to match existing. Match existing stone in color, texture, strength and composition. Add stainless-steel lateral anchors to cornice and frieze stones.

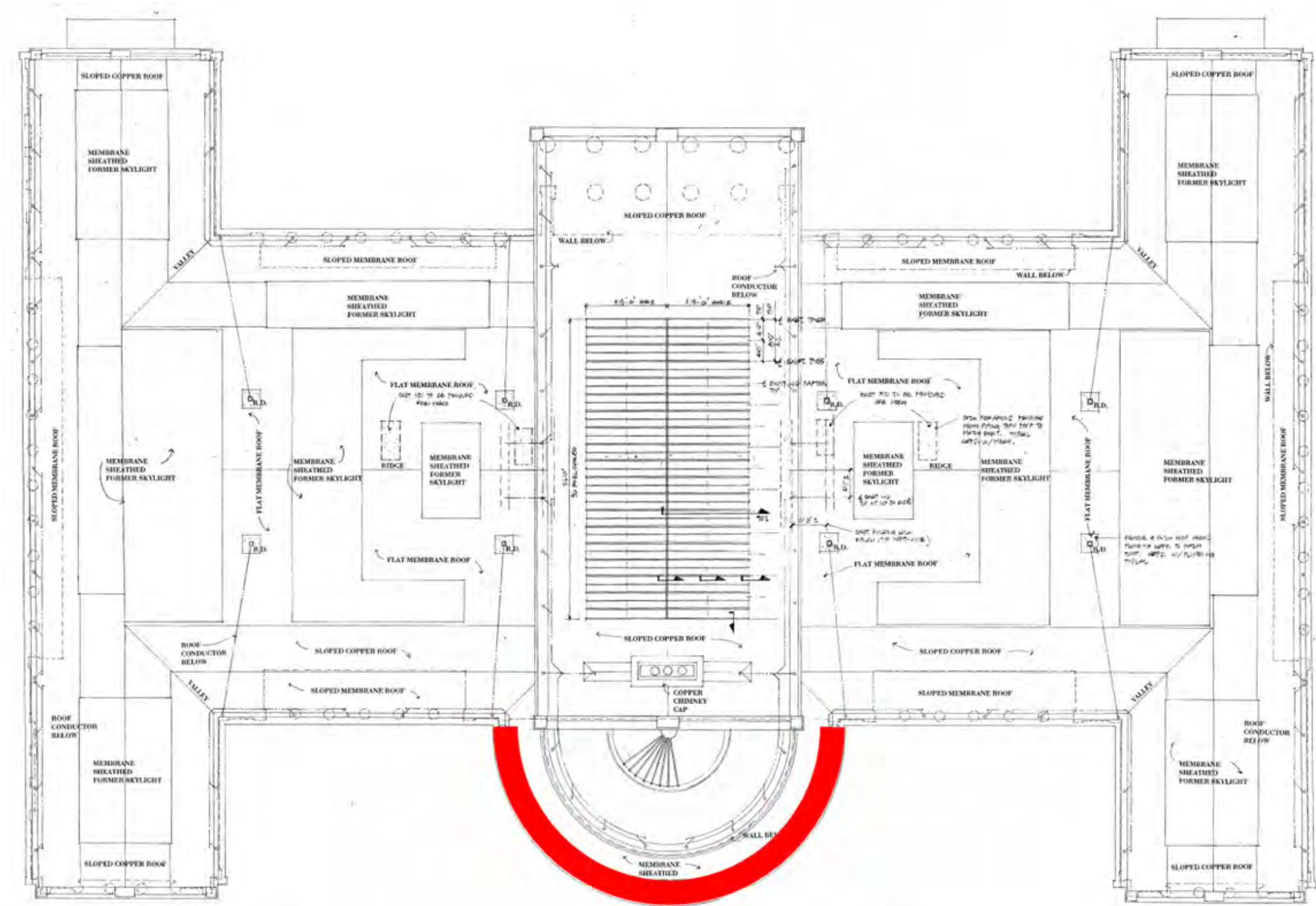




1905 BUILDING

Stone Displacement Hemicycle Cornice

Rebuild Area





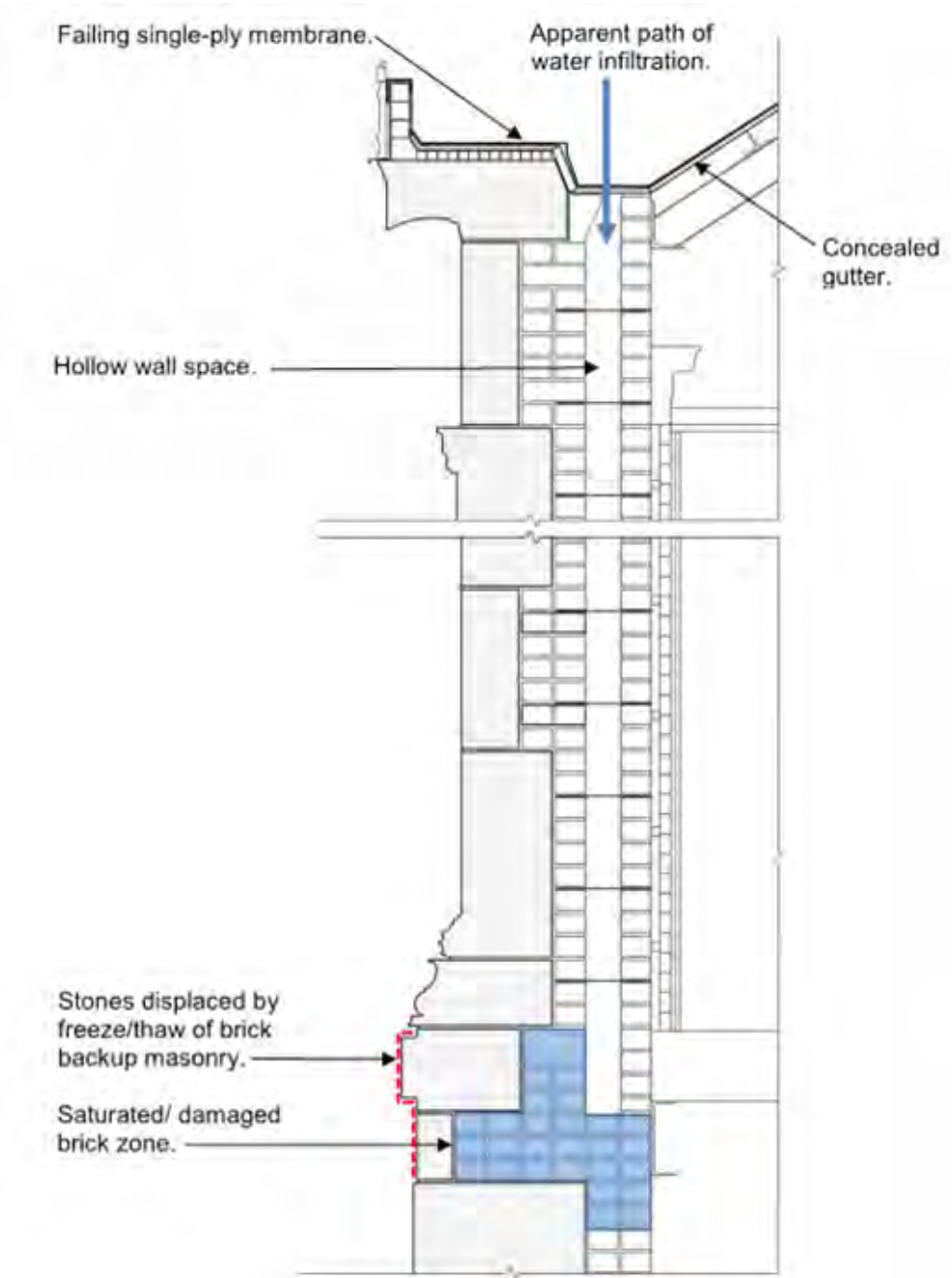
1905 BUILDING

Stone Displacement at 1st Floor Belt Course

**Existing Condition:** Existing stones at the first floor belt course were observed with significant displacement. Displacement was found to be caused by freeze-thaw jacking of the backup brick masonry. The existing white Vermont marble on the façade was tested and found to have excellent freeze-thaw resistance, while the backup bricks were found to have a very high rate of permeability which contributed to their disintegration.

**Proposed Changes:** Address water infiltration issues by replacing the roofing. Remove, tag and salvage historic stones. Replace underlying brick at stone areas that exhibit over ½” of displacement with severe weathering brick and reinstall historic stones with mortar to match existing. Mortar type will be specified based on the analysis of existing mortar. It is assumed that type “O” mortar will be used, and installed compacted in 1/4” lifts. Stone will be replaced with existing salvaged stone if possible, or replaced with marble to match existing.

Work will be phased so that alternate stone sections are replaced to avoid destabilizing the wall. Shoring will be required.

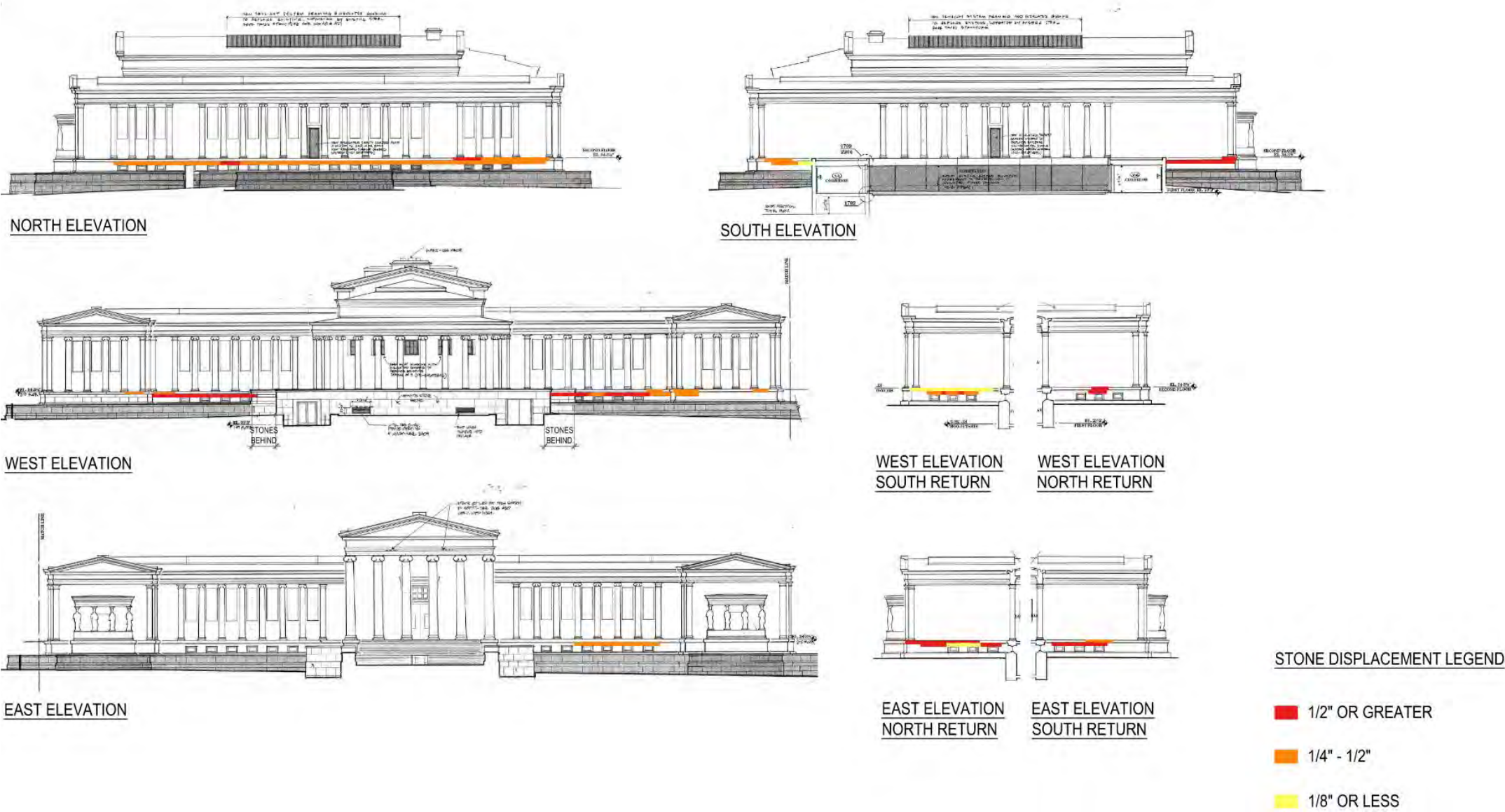




1905 BUILDING

Stone Displacement at 1st Floor Belt Course

Areas of displaced stones.





1905 BUILDING

Mortar/Sealant

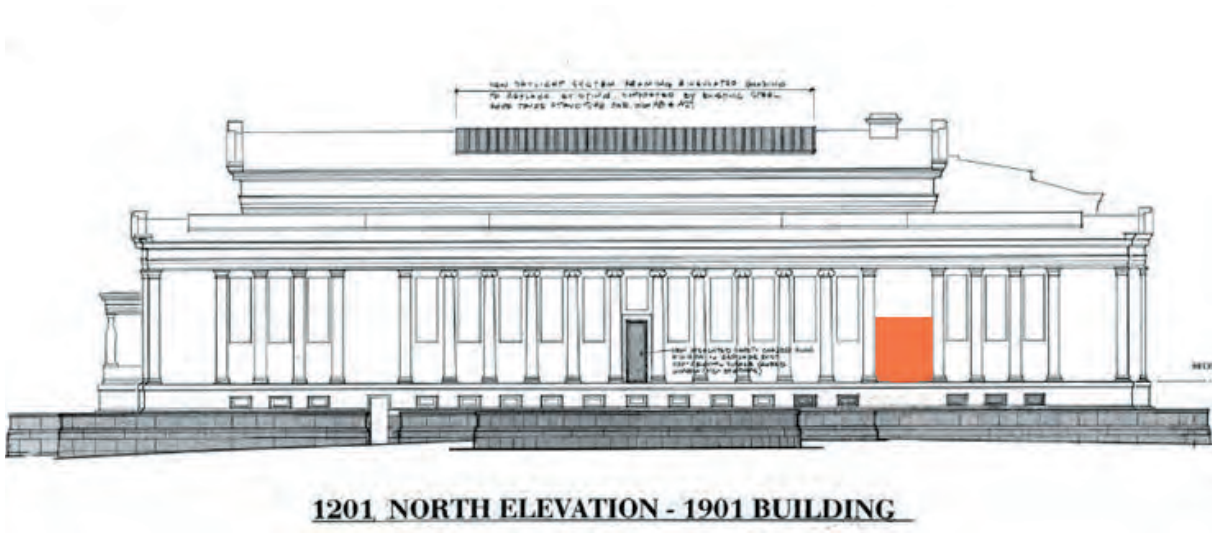
**Existing Condition:** Sealant was installed in joints that were originally intended to be mortar joints. The sealant is trapping water behind the wall causing the stones to spall from freeze-thaw action.

**Proposed Scope:** Remove non-historic sealant to allow water that has accessed the wall to drain out. Remove existing sealant and replace with mortar that matches the original mortar on the building in composition and color. This will restore the function of the mortar joints as an inherent drainage plane for masonry walls. Mortar type will be specified based on the analysis of existing mortar. It is assumed that type “O” mortar will be used, and installed compacted in 1/4” lifts.

Any spalls to be repaired with stone dutchman repair. Use stone salvaged from the new opening in the façade where the north bridge will connect.

At this stage, we assume Cathedral Stone Jahn M120, or Edison Coatings Custom System 45 MR will be acceptable for patching.

See cut sheets on page 6.

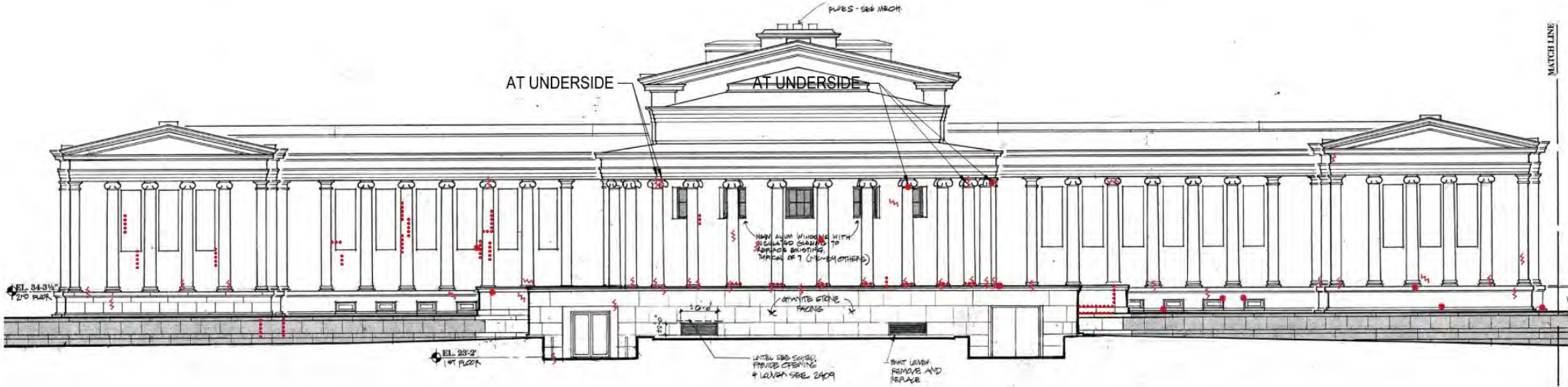


Approximate location of new door opening.

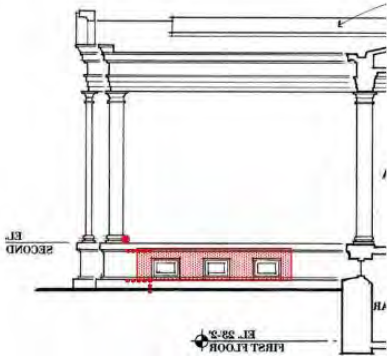


1905 BUILDING

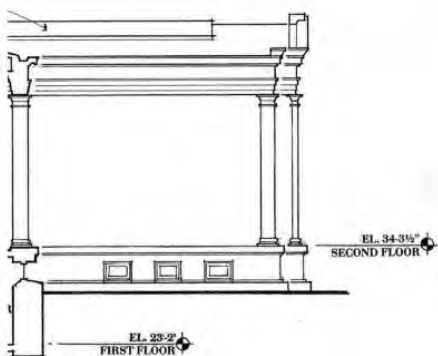
Facade Repairs



WEST ELEVATION



WEST ELEVATION SOUTH RETURN



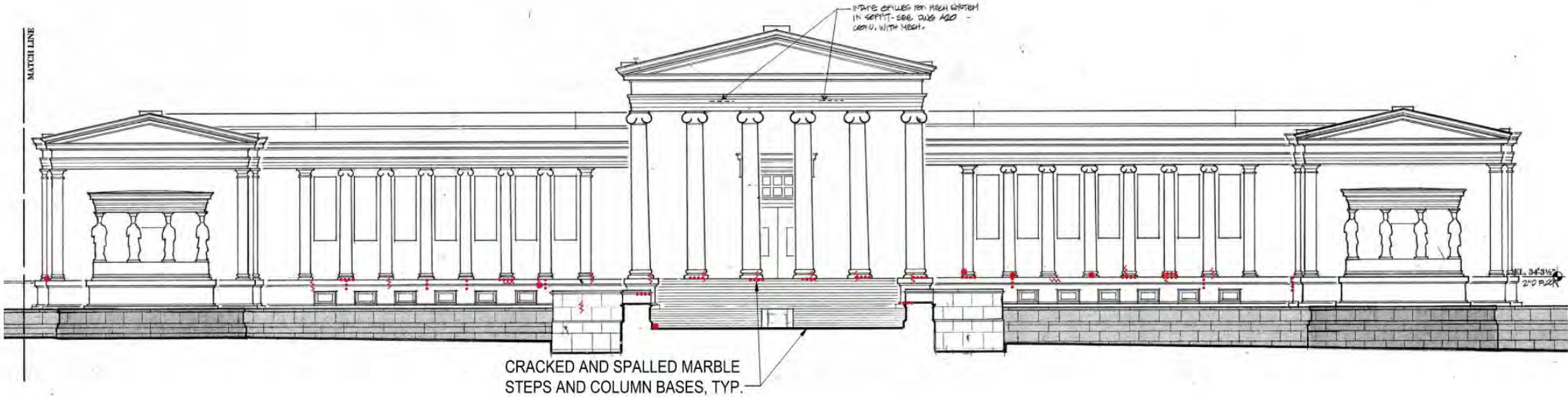
WEST ELEVATION NORTH RETURN

LEGEND

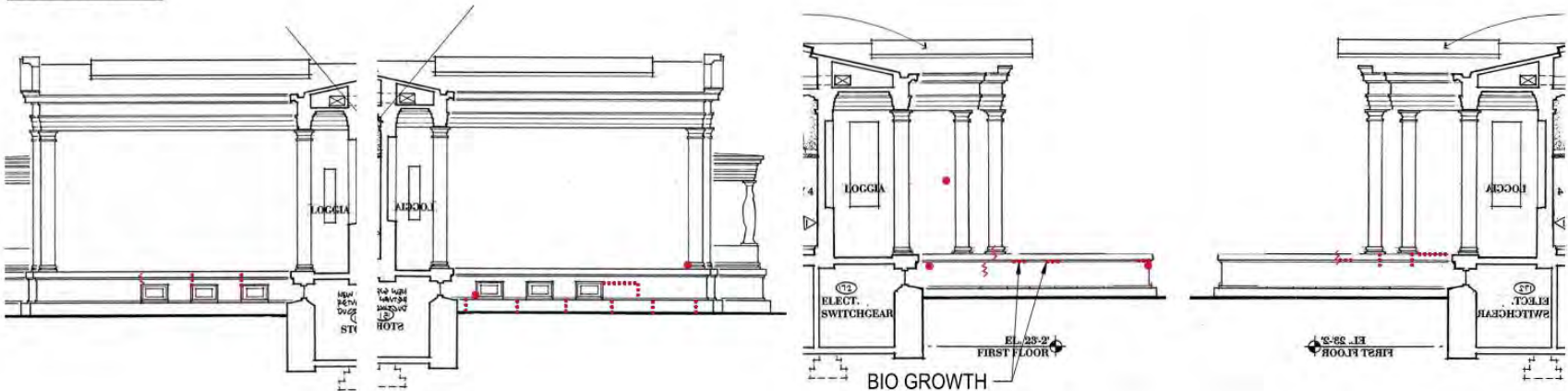
- CRACKED STONE
- OPEN MORTAR JOINTS
- SPALLED STONE

1905 BUILDING

Facade Repairs



EAST ELEVATION



EAST ELEVATION NORTH RETURN

EAST ELEVATION SOUTH RETURN

EAST ELEVATION SOUTH CENTRAL RETURN

EAST ELEVATION NORTH CENTRAL RETURN

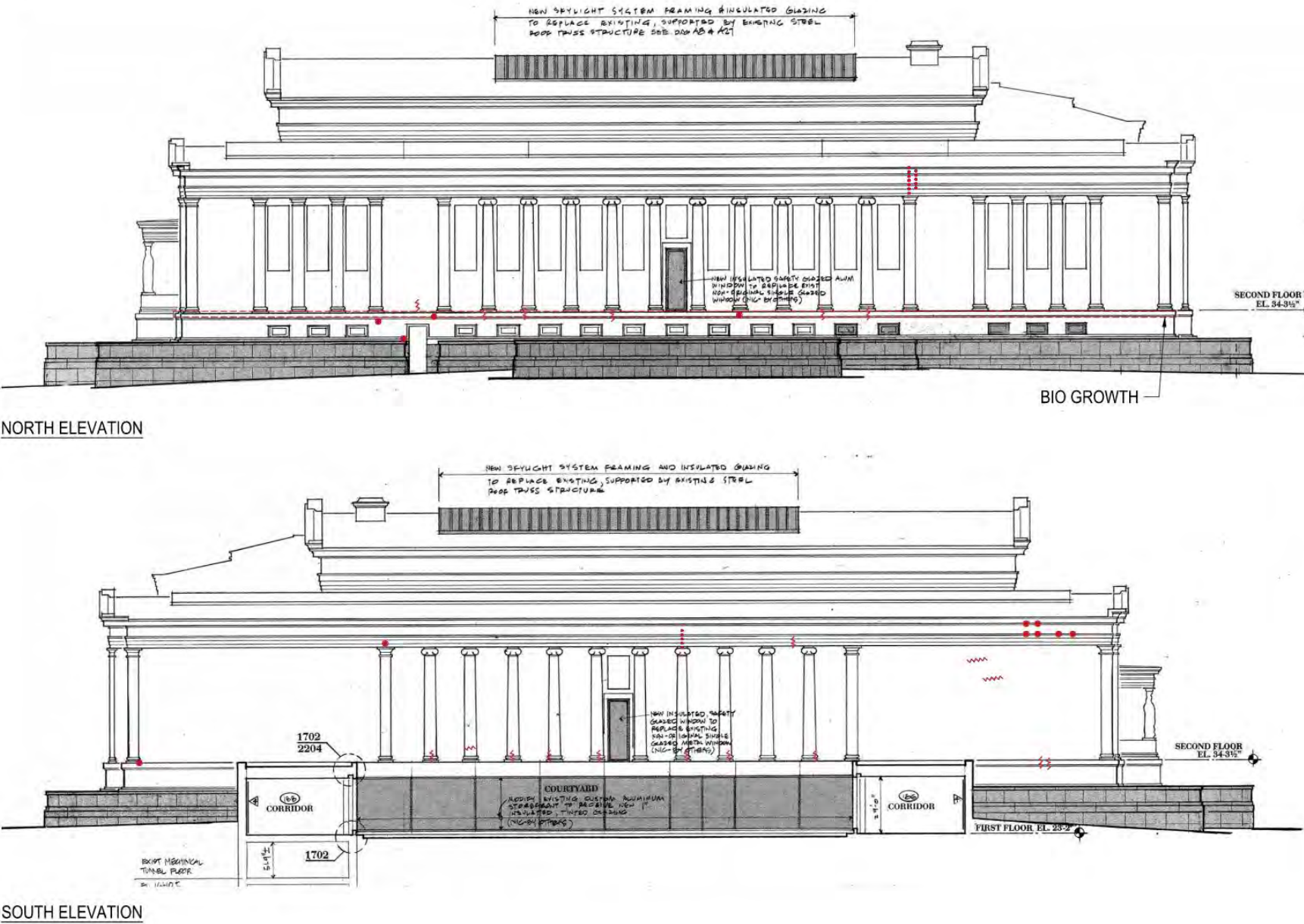
LEGEND

- ⚡ CRACKED STONE
- ..... OPEN MORTAR JOINTS
- SPALLED STONE



1905 BUILDING

Facade Repairs

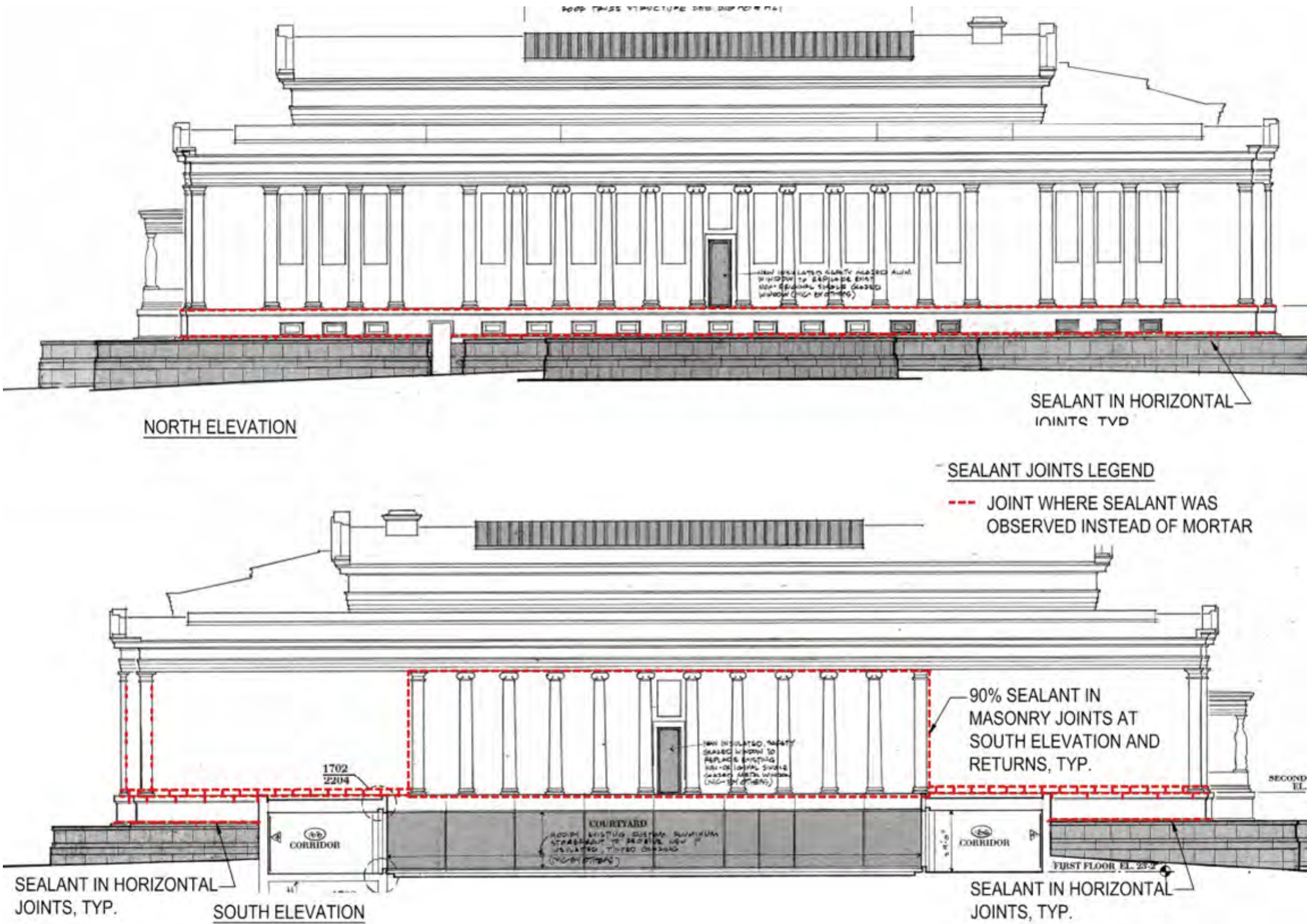


1905 BUILDING

Mortar/ Sealant

Areas where sealant is to be removed and joints repointed.

Mortar type will be specified based on the analysis of existing mortar. It is assumed that type “O” mortar will be used, and installed compacted in 1/4” lifts.



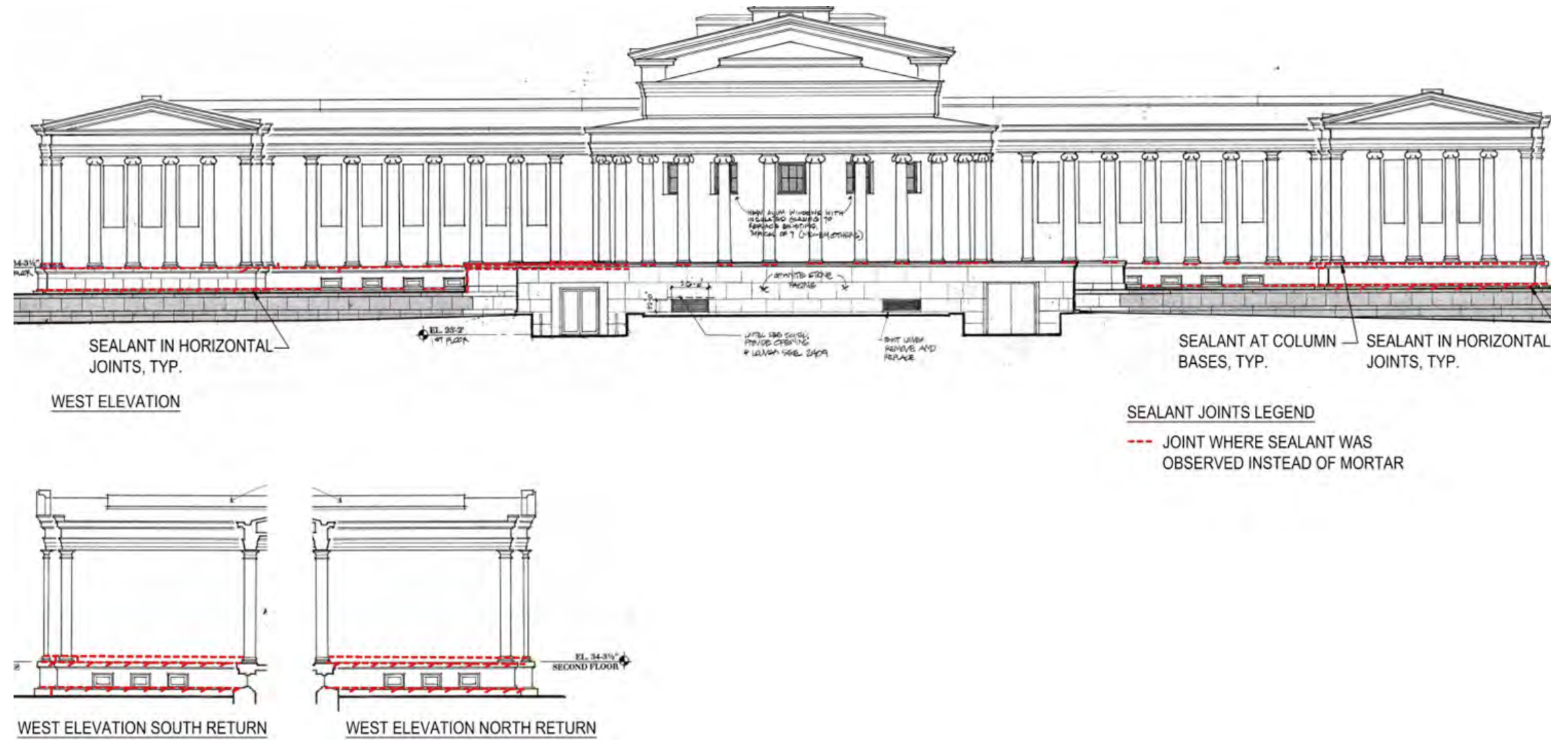


## 1905 BUILDING

### Mortar/ Sealant

Areas where sealant is to be removed and joints repointed.

Mortar type will be specified based on the analysis of existing mortar. It is assumed that type "O" mortar will be used, and installed compacted in 1/4" lifts.

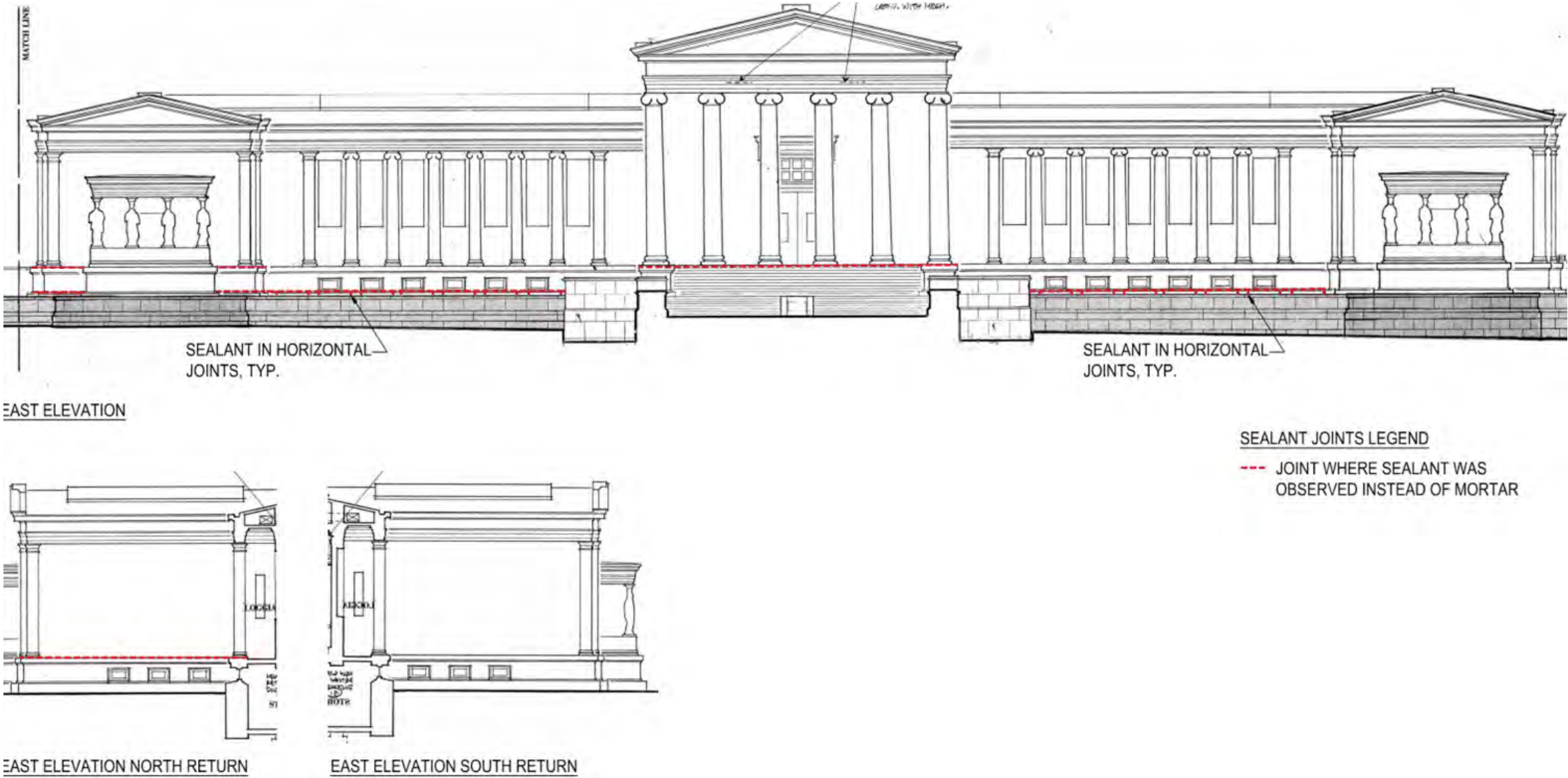


1905 BUILDING

Mortar/ Sealant

Areas where sealant is to be removed and joints repointed.

Mortar type will be specified based on the analysis of existing mortar. It is assumed that type “O” mortar will be used, and installed compacted in 1/4” lifts.





1905 BUILDING

West Stone Patio

**Existing Condition:** The existing EPDM membrane below the stone pavers of the west portion is compromised causing significant water infiltration into the spaces below, in one location a structural member exhibits excessive corrosion which required shoring.

**Proposed Scope:** The existing stone pavers will be removed, tagged and salvaged for reinstallation. The existing EPDM membrane will be removed and replaced with liquid-applied reinforced membrane. Once the membrane is replaced then the stone pavers will be reinstalled in their original location.

See pages 3-5 for new membrane cut sheets.

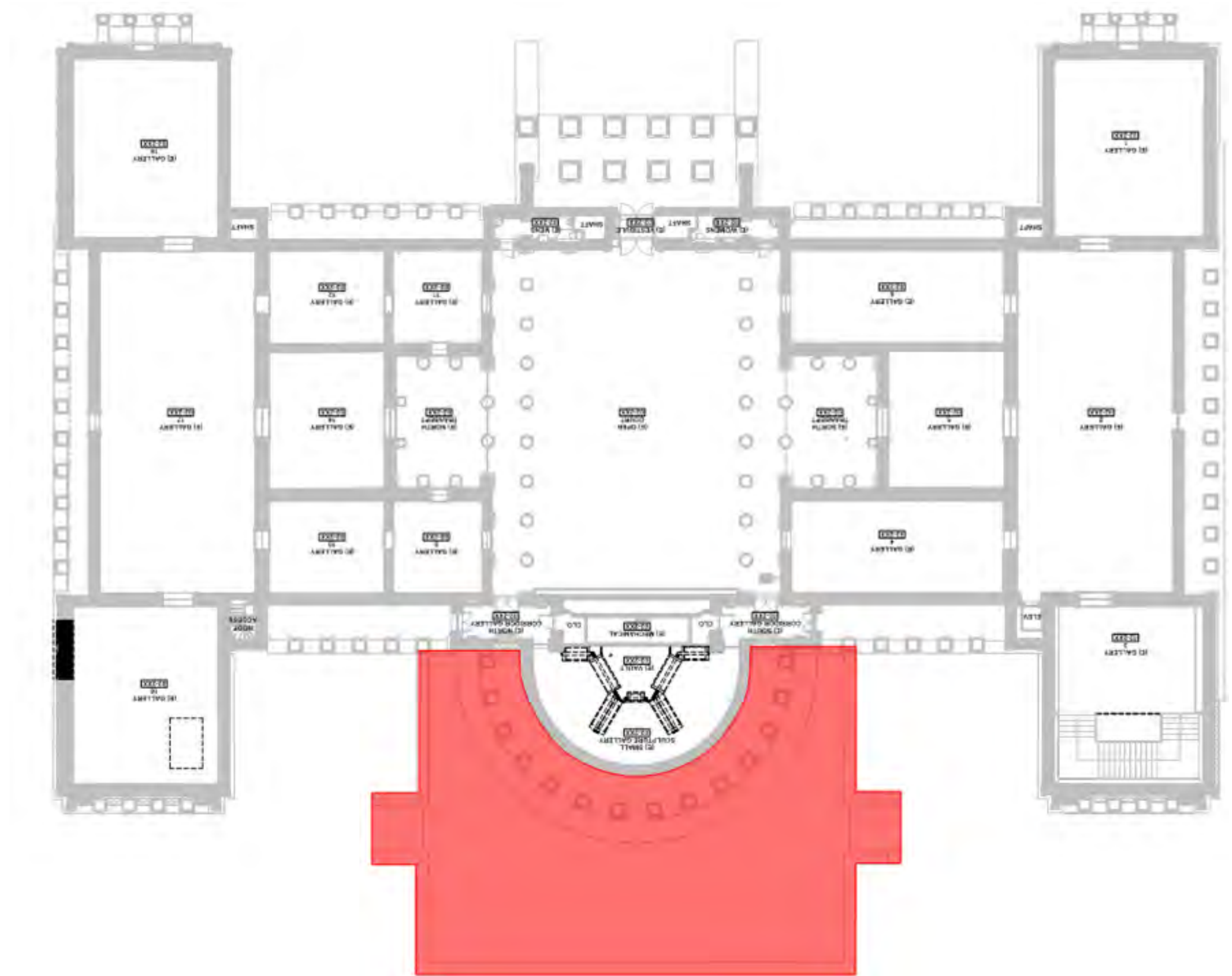


## 1905 BUILDING

## West Stone Patio

Areas of West Patio Roofing to be replaced with liquid-applied reinforced membrane.

See pages 3-5 for new membrane cut sheets.





1962 BUILDING

Roof Replacement at Auditorium Roof

**Existing Condition:** Membrane is past its expected service life and no longer under warranty.

**Proposed Scope:** Replace the existing EDPM rubber membrane with a more robust liquid-applied reinforced membrane with SBS base layer. The color of the roof would be black to match the existing roof color.

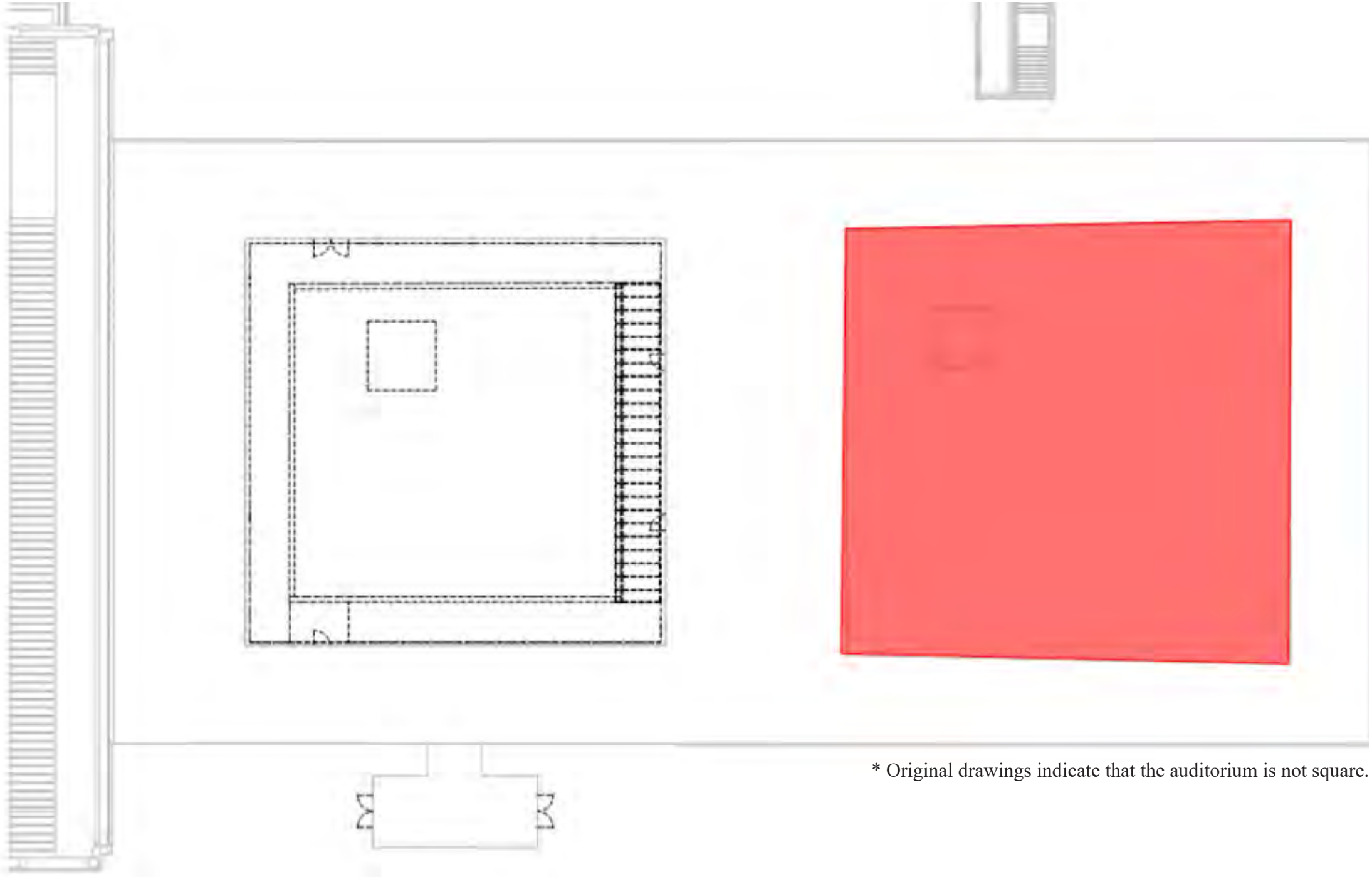
See pages 3-5 for new membrane cut sheets.



1962 BUILDING

Roof Replacement at Auditorium Roof

Area of Auditorium Roof to be Replaced with Liquid-Applied Reinforced Membrane



\* Original drawings indicate that the auditorium is not square.



1962 BUILDING

Façade Work

**Existing Condition:** Cracked, chipped and spalled marble units were observed in localized areas.

**Proposed Scope:** The design intent is to preserve as much of the historic material as possible. Proposed repairs would include pinning units in place and filling pin openings with stone plugs to match host stone. Cracks to be repaired/ finished with patching compound to match host stone. At this stage, we assume Cathedral Stone Jahn M120, or Edison Coatings Custom System 45 MR will be acceptable for patching.

Spalls to be repaired with stone dutchman using stone salvaged from the new door opening in the east façade, or with matching marble material (including material for stone plugs). Example is provided to show anticipated blending.

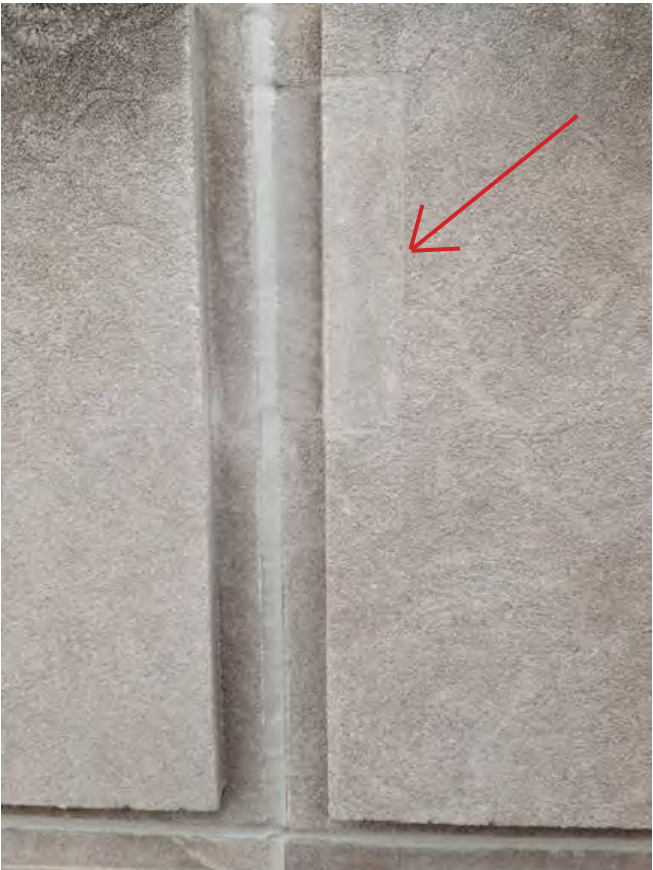
See cut sheets on page 6.



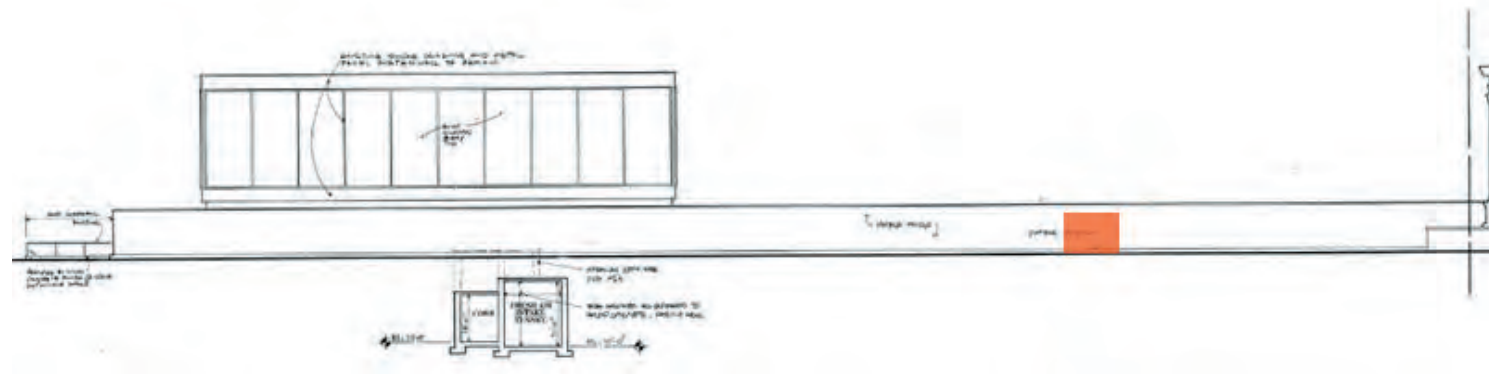
West facade of the 1962 building.



Crack in marble.



Example of an NYC LPC approved matching limestone dutchman performed at the Guggenheim Museum in 2014. We intend to achieve a similar match for marble.

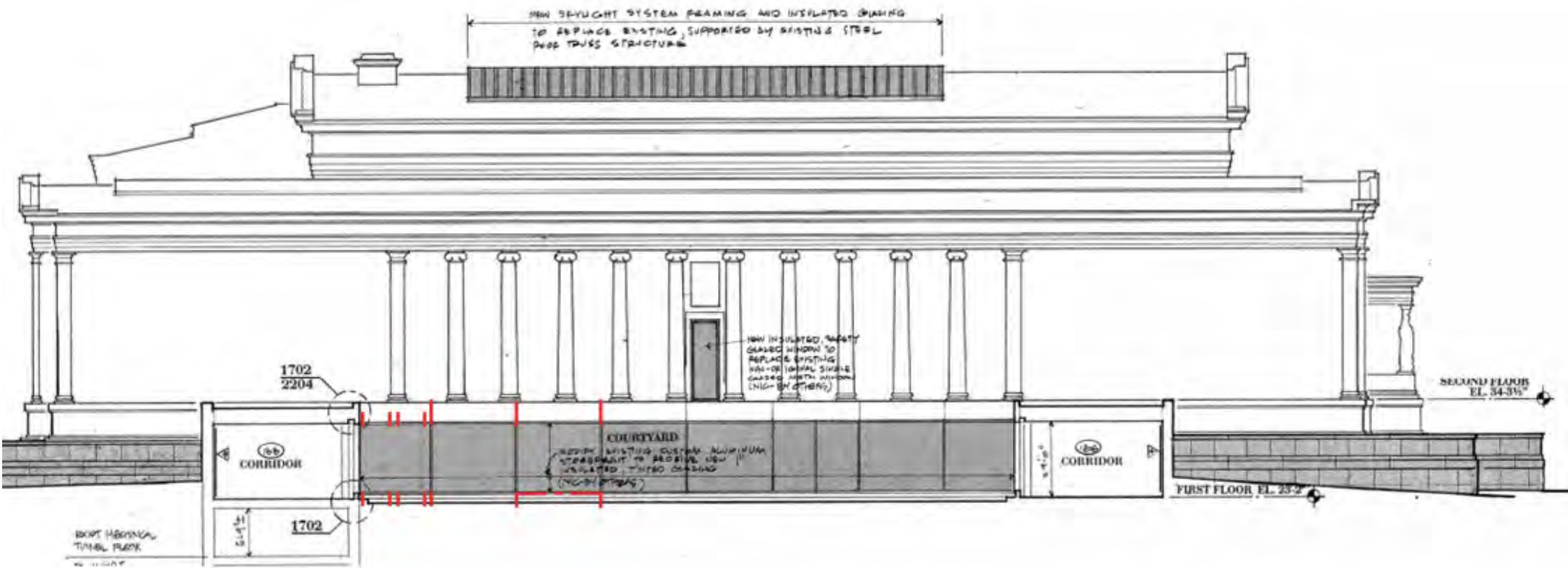


Approximate location of new door opening.

1962 BUILDING

Façade Work

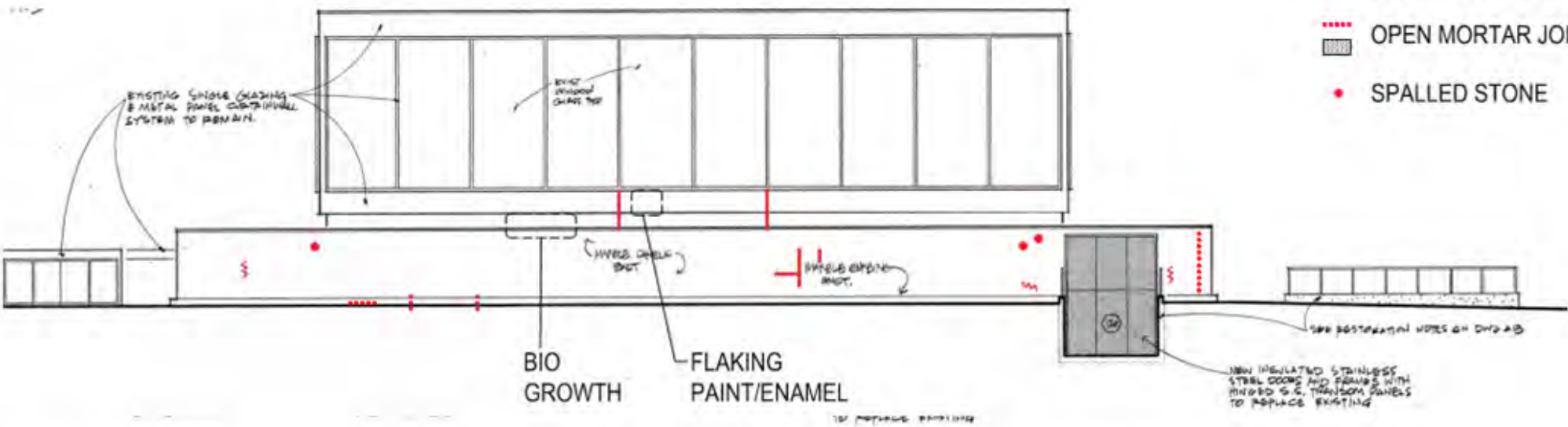
Areas to be repaired, using the methods described on page 33.



SOUTH COURTYARD ELEVATION

LEGEND

- OPEN SEALANT JOINT
- ⚡ CRACKED STONE
- ⋯ OPEN MORTAR JOINTS
- SPALLED STONE



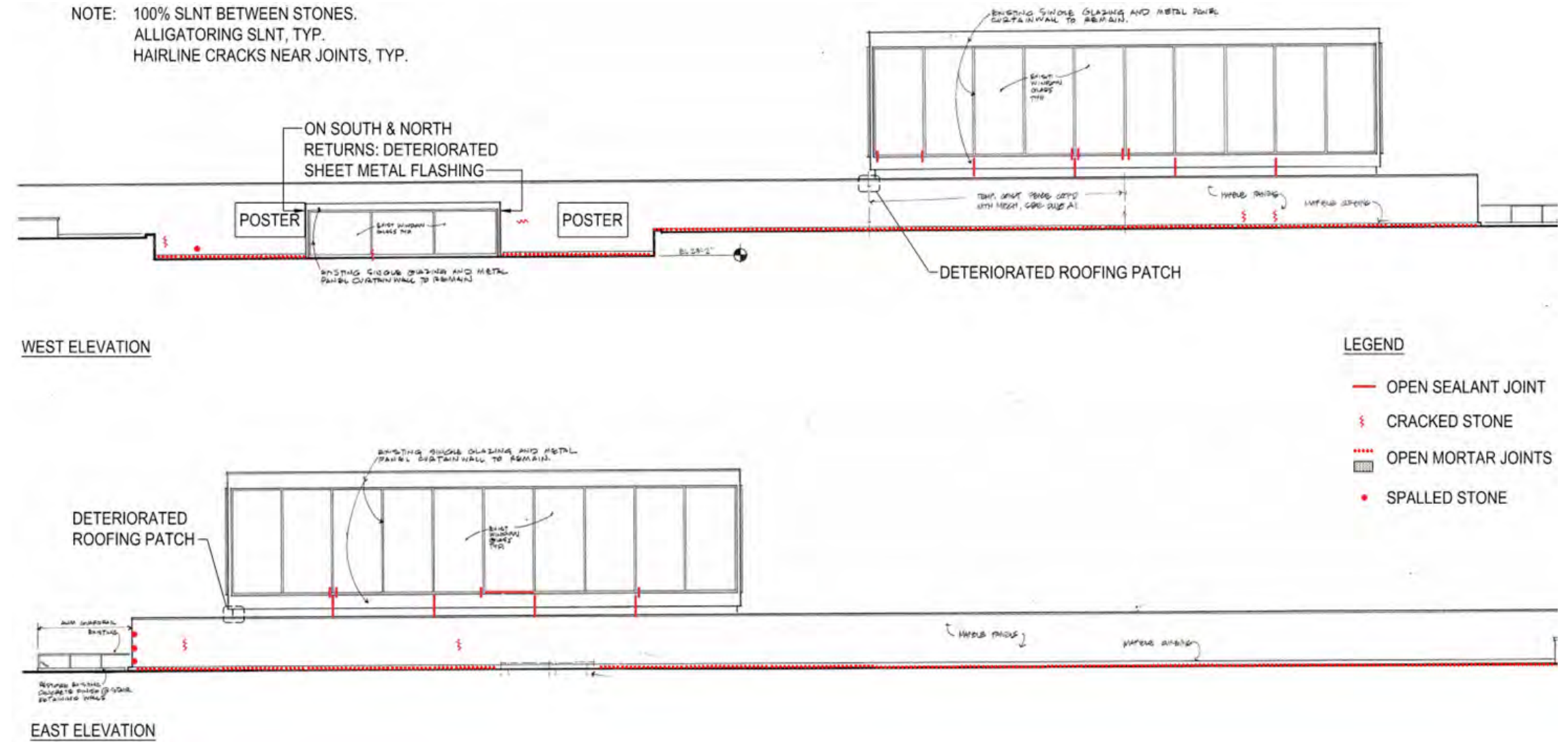
SOUTH ELEVATION



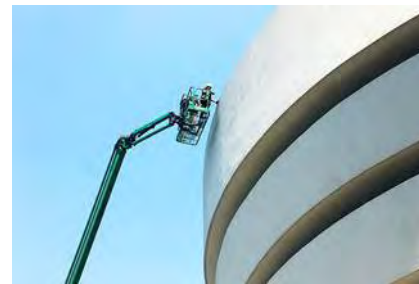
## 1962 BUILDING

## Façade Work

Areas to be repaired, using the methods described on page 33.



# Thornton Tomasetti



[www.ThorntonTomasetti.com](http://www.ThorntonTomasetti.com)